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THE UNIVERSITY OF ALBERTA

CHARACTERISTICS OF COUPLES IN VIOLENT
RELATIONSHIPS: IMPLICATIONS FOR PREDICTING
SUCCESSFUL MARITAL THERAPY

by

RON LEHR

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH
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IN

COUNSELLING PSYCHOLOGY

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY

EDMONTON, ALBERTA

SPRING, 1988

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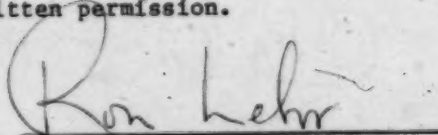
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Date: 4 March 1988

DEDICATION

To my grandfather, Robert Saunders
and my two sons, Joshua and Daniel.

ABSTRACT

The data compiled on couples in abusive relationships has been mostly aggregate in nature. The present study examines physical violence at the level of the relationship from the perspective of both individuals involved.

The major purposes of this research were: to study couples in violent relationships to examine characteristics that were predictive of outcome in therapy; and to discern structures within the abusive system related to the dimensions of family cohesion and family adaptability. The Circumplex Model of Family Functioning provided the conceptual framework.

75 intact couples, reporting on their own relationship, comprised the sample. This number represented approximately 70% of couples applying for therapy at one Edmonton centre during a nine-month period.

All couples responded as individuals to three research instruments: the Personal Assessment of Intimacy in Relationship questionnaire as an assessment of intimacy in the relationship; The Conflict Tactics Scales as a measure of violence in their relationship; and FACES III as a test of family functioning related to cohesion and adaptability. Data analysis consisted of a discriminant function analysis of variables based on relationship scores derived from the PAIR, FACES III and the CTS.

The research question examining characteristics of couples in violent relationships was not confirmed. Social intimacy and intellectual intimacy, as measured by the PAIR were found to be strong indicators of predicting group membership. The higher these scores, the greater the likelihood of success in therapy. The dimension of cohesion in a couple's relationship as well as level of violence in the relationship, though not significant, suggested that these variables showed promise for future research. A discussion of the lack of significant findings is provided, with emphasis upon the nature of the sample and the low number of severe violent cases.

Other research findings suggested that violent couples are significantly more rigid on the Adaptability dimension of FACES III, which confirms previous clinical hypotheses. Contrary to suggestions that violent couples are enmeshed, the present study found they were significantly more disengaged as measured by FACES III. Implications of the findings for therapeutic intervention of violent couples are discussed.

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CHAPTER I
INTRODUCTION

"Family violence, the slap that is felt for generations."

(Mathias, 1986, p. 20)

To date, little has been written on couples who attempt conjugal therapy as a solution to rectifying the violence in their relationship. Characteristics of violent couples presenting for therapy has not been previously studied. In a recent sociological review Gelles (1985) states that "as yet, there are few empirical studies that assess the impact of existing prevention and treatment efforts in the field ... of domestic violence" (p. 363). Furthermore, Bagarozzi and Giddings (1983) also stress the need for research projects to be conducted which would provide the practitioner with some data-based guidelines for client selection, appropriate treatments and contraindications.

Over the last two decades, husband-to-wife and wife-to-husband violence has become a major concern to professionals in many disciplines. More specifically to the present study, wife abuse has also "come out of the closet" receiving considerable attention. Having once been thought of in relative isolation, recent research has indicated that family violence is not restricted to any particular segment of society but is found in every class and at every income level.

Gaining a knowledge and understanding of why husbands beat their wives has been the focus of research since the early 1970's. Straus, Gelles and Steinmetz (1980), for example, suggest that proverbs such as "A man's home is his castle" go a long way in giving insights into human nature and society. The home belongs to the man and what goes on within the walls of the "castle" is shielded from prying eyes. Like a medieval castle, a modern home can contain its own kind of torture chamber (Straus et al., 1980).

To date, much of the work in the area of wife abuse has been done from a sociological perspective with an emphasis on the overall role that society plays in promoting and supporting violence in the home (Gelles, 1985). Sociological study has yielded considerable information but has limitations in that much of the research has been carried out only from the perspective of the abused woman. More recently researchers, like Coleman (1980) and Gondolf (1985), have begun to look at characteristics of the men who batter. Though slow in coming, the knowledge gained is starting to give a more complete picture of the problem of husband-to-wife and wife-to husband violence.

Statement of the Problem

The present study was an attempt to add to the domestic violence research by focusing attention on couples who are in violent relationships. At present there are a large number of shelters and treatment programs for victims of spouse abuse. There are also an increasing number of treatment programs being designed

for the abusing spouse. All of these are positive attempts at providing help to the abused and the abuser. However, evidence is available to show that a very high percentage of victims return to their violent relationships (Gelles, 1976). Reasons why they return have also been the topic of considerable research (Aguirre, 1985; Strube & Barbour, 1983).

Conjoint marital therapy is becoming more of a treatment of choice for domestic violence. At present there is a very large gap in the literature in describing the dynamics of the abusive relationship. The present research was an attempt to gain knowledge of the couple in the abusive system which would help practitioners better understand and work with them.

The conceptual framework for the present research is the Circumplex model of family functioning (Olsen Russell & Sprenkle, 1983). The Circumplex model operationalizes salient dimensions of marital and family therapy and provides measures such as the Family Adaptability and Cohesion Evaluation Scales (FACES III) which purport to be conceptually sound in terms of understanding the structure of the marital system along the lines of cohesion and adaptability.

Given that the major purpose of this study was to determine whether there are characteristics of couples in violent relationships that would be predictive of outcome in marital therapy, the following questions were considered:

4

- Are there some family structures that contribute more to a successful prognosis of outcome than others?

- Are there characteristics of couples that are predictive of successful outcome in therapy?

- What is the relationship between the level of violence in the couple system and success in therapy?

- Is marital satisfaction a determinant of success in therapy?

Significance of the Problem

In response to the wide spread problem of wife abuse, the last decade has seen a dramatic increase in shelters for women. As a result, many studies have examined the incidence of abuse, the number of women who return to battering relationships, as well as the characteristics of women who are abused. Many programs have, therefore, attempted to empower the woman to help herself overcome the effects of being a victim of violence.

More recently, recognition that there are a minimum of two people in a violent relationship system has provided researchers and clinicians with the incentive of setting up programs for the male batterer (Gondolf, 1985). The last decade has seen the development of approximately 150 treatment programs to deal directly with batterers (Watts & Courtois, 1981).

Studying couples who are in battering relationships will provide long awaited and much needed information about the violence-prone system. At present, there is a high drop-out rate of violent couples in therapy. Little is known about couples which

would enable a clinician to foresee the possibility of drop-outs. The present study will address this problem but, more importantly, will provide information about the couple that would be useful in the therapeutic milieu. Specific information about the structure of these relationships, as well as specific information about couple characteristics will provide important information in terms of treatment approaches best suited to various couples. In addition, contraindications to couple therapy will save client and therapist time, and energy.

Explanation of Violence Terms

The literature abounds with various words used to describe physical abuse in the home. Some of these terms refer to specific acts such as 'wife abuse', where the focus has been placed on the woman in a victim position. Other terms are of a generic nature such as 'domestic violence', where physical violence is viewed without reference to the victim-victimizer dichotomy. The present study uses terms that are widespread in the literature such as: wife abuse, spouse abuse, battering man, relationship violence, couple violence, conjugal violence and family violence. This author's use of these terms are meant to reflect the perspective that physical violence occurs within the couple's relationship without actual reference to the victim-victimizer positions. The flow of husband-to-wife and wife-to-husband violence can be obtained by reference to Appendix I.

Overview of Chapters

This chapter has provided a summary of the statement of the research problem and the significance of the study.

A detailed review of the literature on conjugal violence is presented in Chapter II. Chapter III provides a detailed description of the theory and literature related to the circumplex model of family functioning. The methodology and research procedures, emphasizing the importance of dyadic research, are outlined in Chapter IV. Chapter V consists of a presentation of the data results and interpretation. Conclusions, implications, limitations of the study and suggestions for further research are provided in the final chapter.

CHAPTER II

CONJUGAL VIOLENCE: A REVIEW OF RELATED LITERATURE

Overview

"How do I know that he loves me if he doesn't beat me?"
(Marshall, 1971; p. 153.).

Norms for the marital relationship are often characterized by warmth, affection, and solidarity but simultaneously there exist norms for permitting or encouraging aggression (Straus, 1976). In the United States the family is the preeminent social setting for all types of aggression and violence, ranging from the cutting remark to slaps, kicks, torture and murder (Gelles, 1974). Developments in the study of this major social problem has seen a movement from an early phase of studying the battered woman to another phase of establishing methods of treating male abusers (Cook & Frantz-Cook, 1984).

As early as the 1970's the lack of attention marital therapists paid to abusive couples who did not want to terminate their relationship was surprisingly little (Margolin, 1979). This situation has changed very little as revealed by Neidig and Freidman (1985) who emphasize that the literature reveals a number of treatment groups that have been established for men as well as supportive counselling for women but that there have been few models available for the treatment of couples who wish to stay together and attempt to control violent behavior.

The purpose of this present review is to give an overview of the development of wife abuse from the early casual theories through to the present state of knowledge. To give the reader an appreciation of the current lack of knowledge of violence in families as it applies to the couple, this review concentrated on presenting causal explanations of wife abuse as well as a presentation of what has been learned about individuals within the abusive relationship and the qualities and characteristics of the abusive relationship itself.

Theoretical Approaches to Spouse Abuse

Gelles (1980), in reviewing research on domestic violence conducted in the seventies, concluded that one of the major research issues was to develop theoretical models of the causes of family violence. Five years later in another major review of the literature on family violence, Gelles (1985) discovered that the only existing theoretical model from the general study of violence to be frequently applied to violence in the home has been social learning theory (Bandura, Ross, and Ross, 1961). Despite the lack of application to clinical work, a review of the literature on domestic violence indicates that much of the present knowledge of wife abuse comes from the contributions of many theoretical approaches.

Sociological Theories

Because of the large volume of sociological literature on family violence, this section of the review presents sociological theories of spouse abuse. More specifically, the contributions of resource theory, and exchange/social control theory will be discussed. Social learning theory, which has its roots both in sociology and psychology, will also be discussed in this section.

Gelles (1985) states that the first theoretical approach applied to family violence is that of resource theory. This theory proposes that all social systems rest to some degree on force or its threat (Goode, 1971). He says that the use of violence depends on the resources a family member can command and that the more resources, the more force can be used, but the less it is actually employed. Those with the fewest resources tend to employ force and violence the most. Gelles (1974) gives the examples that husbands tend to resort to violence when they lack the traditional resources associated with the culturally assumed dominant role of the male in the family.

Gelles' (1983) exchange/social control theory asserts that people hit and abuse other family members simply because they can. According to this formulation, domestic violence is governed by the principles of costs and rewards. Violence is used when rewards exceed costs. Gelles (1985) believes that the private nature of the family, the reluctance of social institutions and agencies to intervene in violence, and the low risk of other interventions,

reduce the costs of violence. In addition to this, our culture approves the use of violence as an expressive and instrumental behaviour which also raises the potential rewards for violence.

The most frequently applied theory to family violence, social learning theory, tends to trace the wife abuse sociologically to a violent culture. According to the social learning formulation of marital violence, the overt expression of anger and frustration can be the breeding ground for more intense emotional and physical abuse at a later time. Social learning theorists base this view on research showing that engaging in aggressive activities tends only to produce greater subsequent levels of aggression (Margolin, 1979). Social learning theorists also predict, however, that the more frequently coercive behaviours are performed by one spouse the more likely that they will become a standard part of the behavioural repertoire for both that individual and his partner (Margolin, 1979).

Margolin (1979) describes a treatment program for couples who mishandle anger and/or are physically abusive. Based on a social learning conception of marital aggression, the treatment endorses the elimination of demonstration of anger in abusive couples and elaborates upon ways to identify preliminary anger cues, to establish a ground rule that abusiveness is unacceptable, to develop alternative responses that interrupt conflict patterns, and to modify faulty relationships assumptions.

Psychoanalytic Theory

Initially, spouse abuse was approached from a psychiatric point of view (Shultz, 1960; Snell, Rosenwald & Robey, 1964). In the first of these two studies, Shultz (1960) explained wife assault as arising from frustrated dependency needs. When the husbands dependency gratification which resulted from a poor child-mother relationship, is being cut off, he overtly attacks the frustrating object, his wife. The conflict is one between hostility toward the wife and dependency on her. In the second study, Snell et al. (1964) concluded that, as a couple, the masochistic wife needed to control the relationship which served to meet the husband's dependency needs. The periods of violent behavior served to release him momentarily from his anxiety about his ineffectiveness as a man, while at the same time giving his wife apparent masochistic gratification and helping probably to deal with the guilt arising from the intense hostility expressed in controlling her castrating behavior (Snell et al. 1964).

Psychoanalytic theory which accepts the catharsis of anger, primarily views aggression as an innate tendency that needs to be discharged periodically to avoid a much larger violent outburst at a later time (Margolin, 1979). Bach and Wyden (1968) present a modified version of catharsis theory in their explanation of aggression. They believe aggression is instrumental to producing change in marital relationships, and is necessary to supply the relationship with stimulation and to avoid a build up of

unexpressed anger. Saunders (1977) believes that research has failed to support catharsis theory. Retaliating with aggressive outbursts has tension reducing effects for the batterer that often feel good but physical aggression can act as a powerful reinforcer which will increase the probability of future acts of aggression making the long term effects of catharsis negative.

Systems Theory

A theoretical approach which is gaining favor in the study of family violence is general systems theory (Bertalanffy, 1968). A gap exists, however, between understanding the causes of conjugal violence from a systems perspective and treating violent couples using the principles of general systems theory. The following paragraphs give systems theory explanations to the causes of conjugal violence and then attempts to explain how these concepts are applied in a clinical setting.

In the study of family violence, Straus (1973) and Giles-Sims (1983) were two of the first to apply what has been referred to as a social system approach (Gelles, 1985). Here, violence is viewed as a system product rather than the result of individual pathology. System operations are what maintains, escalates, or reduces levels of violence. Giles-Sims (1983) states that a systems theory approach to conflict has to look at the process of conflict within a family system and the effects of different system characteristics on the process of conflict. In addition, maintenance of the system becomes more important over time than

specific conflicts. Systems theory focuses on the processes that occur and the interrelationships between events, people, or other elements of the system and wife battering results from ongoing patterns of interaction within the system.

Looking at the patterns of interaction within the system shifts the focus from a consideration of the isolated behaviors of individuals to a consideration of interaction, and to the effects of the individual's behavior on others, the reactions of others to the behavior, and the context in which the behavior takes place (Giles-Sims, 1983, p. 4).

Cook and Frantz-Cook (1984), commenting on the forces maintaining violence, focus on describing a pattern of relationship in which there is unilateral control with little room for negotiation.

When a couple is locked into a rigid complementary system and the man has learned to be violent in response to stress, battering is likely to become the couple's resolution of conflict. In this systemic view, violence erupts as the couple struggles over the functional rules of the relationship rather than the specific problem (p. 85).

Goode (1971) believes both social variables and interpersonal-process variables influence how violence occurs and is maintained. Goode (1971) posits that the family, as a social system, has well-defined rules and structured power, such that, men who lack sufficient resources to hold the socially prescribed role

in the family may use physical force to compensate for the lack of resources.

Hotaling (1979) maintains that once violence has occurred within the family, the probability of further violence is increased. This is due to the increased expectation of other family members that further violence will occur and this expectation itself tends to increase the likelihood of further violence.

Also consistent with general systems theory is the work of Walker (1979) who formulated a 3-stage model which has been commonly referred to as the 'cycle of violence'. The first stage is the period of conflict escalation leading to the second stage of the battering episode, and finally to the third stage of reconciliation marked by the man's contriteness and pleas for forgiveness and the woman's return to him. Walker (1979) maintains that this third stage provides the woman with the reinforcement to stay in the relationship.

Family violence is an area of research that lends itself well to a general systems approach. Many of the questions policy makers, researchers and victims want to answer focus on processes. Despite this need, there are very few examples applying a systems approach to the family (Straus, 1973; Kanton, & Lehr, 1975). One of the reasons for the lack of application to the treatment of violent couples has been the strong feminist resistance to using systems theory as a useful, guiding framework. They maintain that

in holding both spouses equally accountable for the abuse of one, a systemic perspective exonerates the man for resorting to physical force (Combrinck-Graham, 1986). In addition, many family therapists seem uncertain about treating violent couples conjointly. These concerns center around the use of 'no-violence' contracts as a workable method of ensuring safety. As well, family therapists question the effectiveness of removing members of the family from the home in treating violent couples.

Recently, the literature has seen an increase in articles describing a systemic approach to the treatment of violent couples. This has usually been accompanied by strong critiques from both feminist and non-feminist groups alike. A very recent example is that of Lane and Russell (1987) who applied a Milan/Systemic model with violent couples. They declared they were acutely aware that the trend, nationally, was to adopt a 'victim-victimizer' dichotomy and to see one member of the relationship as abused and exploited by the other. Lane and Russell (1987) believe that neither the 'victim/victimizer' nor 'victim-blaming' are useful ways of approaching domestic violence. They, therefore worked with their couple by observing interactional patterns believing the pattern of violence was maintained by the premises and causal attributions couples used to explain their experience.

In response to Lane and Russell (1987), Bograd (1987) contends that although systemic therapists can argue that much is gained by systemic circular questioning, she fears too much is lost when

violence against women is concerned. Roberts (1987) adds that a systemic treatment of violent couples fails to address the issue of economic inequality in most relationships and in the larger societal context. Economic dependence of the female on the male has been shown in previous studies to be related to why women stay in violent relationships (Gelles, 1976) and why many return (Aguirre, 1985). Roberts (1987) also criticizes Lane and Russell's (1987) stance on neutrality by quoting Karl Tomm's (1987) most recent work on the Milan/Systemic model. He believes that all interviewing is interventive and that it is impossible not to intervene given that the therapist's questions shape what a family talks about and their view of the problem.

Other advocates of a systemic approach to the treatment of family violence include Krugman (1986) and Shapiro (1986). Krugman (1986) directs couple therapy by observing the principles of safety first; responsibility and control second; and the rights of the victim third. Shapiro (1986) advocates the use of a systems approach, with violent families, as being extremely effective if the resistance and fears of both therapist and family are addressed. He believes that by the time these families enter therapy, they are usually ready to give up violence but their problem is that they do not know how to stop the escalating battles that lead to violence.

Factors Related to Spouse Abuse

Weitzman and Dreen (1982) point to an emerging psycho-social literature on the role of the batterer and an established literature on the battered spouse but a dearth of information on the transactional patterns of battering couples. Margolin (1979) believes that many abusive couples do not want protective services and are not choosing to terminate their relationships. As a result, marital therapists have paid surprisingly little attention to the problem of spouse abuse. This lack of attention to the study and treatment of couples in abusive systems is related to the literature having largely focused on the plight of abused women, who, in their attempts to understand and communicate their experience, present only one perspective of the problem (Neidig & Friedman, 1985). Recent work by Coleman (1980), Straus et al. (1980) and Gondolf (1985) have attempted to create a balanced view of men and women in abusive relationships. Their studies of men in abusive relationships have led to a more integrated understanding of wife abuse. The Straus et al. (1980) study, for example, was an attempt at defining characteristics of both husband and wife in the shared violence of the relationship. They arrived at characteristics that were important for violence by the husband, but not violence by the wife. Characteristics unique to violence by the wives but not to violence by the husbands were also defined. In a recent work Szinovacz (1985) stated that, in order

to fully understand the abusive system, it is necessary to study men and women from the same relationship. Except for the Straus et al. (1980) study, there is very little data based on husbands and wives from the same marriage.

A significant contribution to the study of domestic violence was made by Straus, et al. (1980). In a national study of violence, based on interviews with 2,143 intact families, they identified several social factors which were related to marital violence. And, of particular importance in terms of treatment, they discovered that each generation learns to be violent by being a participant in a violent family. Straus/et al. (1980) also deduced from their research that "It is clear that the more conflict a couple has, the more likely they are to get into a physical fight. In fact, a persisting, severe conflict or something crucial as a disagreement over children, is almost sure to end in at least some violence" (p. 173). The aggression between partners mounts, until name-calling turns to push, and push to hit.

Based on their sample, the authors discovered that cities were found to have a higher rate of violence than rural areas. They speculated that greater social isolation and stress as well as more crowding led to more aggression. It was also found that racial groups, especially Blacks, had higher rates of violence. They proposed this was due to the stress, discrimination, and frustration that minorities encounter and the fact that minorities

are probably disenfranchised from many advantages which majority group members enjoy.

Other findings from this study suggest that younger couples are the most violent and violence was common to all social classes but this was affected by education in that a greater percentage of violence was found from men who had graduated from high school. This study did not support the hypothesis that less education means greater violence. In fact, there was least violence from men who were grammar school drop-outs or had some college education. The conclusion drawn was that it could be more stressful to an individual to have a moderate education than to have little education (Straus et al, 1980).

Straus et al. (1980) did not have enough research in the area of religion to draw substantial conclusions. They did, however, suggest that women without a religious preference were more likely to be abused and husbands without a religious preference were more likely to use violence on their wives.

Economic dependence of wives on their husbands has also been cited many times in the literature as a major factor in domestic violence. Gelles (1976) was the first to study this factor and based on his research hypothesized that the fewer the wives' resources and social power, the more likely they were to remain with their abusive husbands. Aguirre (1985) studied battered women in shelters and found that wives' economic dependence on their husbands almost always ensured that they would return to their

husbands. Similar results were obtained by Strube and Barbour (1983) who found that economic independence and commitment were significantly and independently related to leave an abusive relationship.

Sociologists, like Straus (1974) conceptualize violence as being socially patterned and growing out of the very nature of a given social system. The present study attempts to study violence from the perspective of the individual behavior of the participants and the structures which maintain their system also maintaining or contributing to their violence. Structural sociologists contend that it is cultural norms which legitimize and encourage family violence (Bagarozzi & Giddings, 1983) and they therefore recommend the elimination of these norms which "legitimize and glorify violence in society and family" (Straus et al., 1980, p. 237).

The clinical recommendations offered by Straus (1977) are concerned mainly with the protection of battered women. Although conjoint treatment is recommended, what such treatment should entail is not presented and no recommendations concerning the treatment of battering husbands are made. In their recent national study (Straus et al., 1980), the authors report that the success of individual and marriage counselling in treating problems of family violence is mixed. Little else is said on this matter except for an attack on the therapeutic approach of Bach and Wyden (1968). Straus believes their therapy, which is based on the catharsis approach to violence, does more harm than good. They conclude by

stating that counselling of violent couples is at most a stop gap measure, is temporary and as well, insufficient.

In terms of research methodology, Bagarozzi and Giddings (1983) believe that no behavioural observations of spousal interactions in crucial areas such as dyadic communication, conjugal problem solving and conflict negotiation have been undertaken, so the reliability and validity of spouses' reports of these behaviours are suspect. Bagarozzi and Giddings (1983) also feel that, except for Straus' (1979, 1980) survey of 2,143 families, the data concerning interspousal violence has been collected predominantly from wives. Husbands' reports, interpretations and perceptions of conjugal violence rarely appear.

Violent Couples as Individuals

Weitzman and Dreen (1982) suggest that, individually, each spouse brings to the marriage an already fragile self, which the marriage further depletes. The marriage becomes the next arena for the perpetuation of individual dysfunction that are exposed in the course of marital transaction.

The Battering Man

Compared to studies of women in abusive relationships, there is a real lack of research on the male batterer (Gondolf, 1985). However, this is changing and an attempt is now being made to get a clearer understanding of the abusive man and to develop programs

which would help in their treatment. Gondolf (1985) describes one of many programs developed thus far for the treatment of men who are abusive to their spouses.

Perhaps one of the earliest attempts at trying to characterize abusive men was the work of Coleman (1980). In a study of 33 men, she found data to suggest that the abusive husband is rarely involved in physical conflict outside of the home and that people close to him would probably be shocked and surprised to find out that he is physically abusive towards his wife.

Other characteristics suggested by Coleman (1980) pertained to the men's belief, that to be a man, one must be strong and dominant, superior and successful. Feelings of inadequacy in any of these areas were devastating to the men's self esteem and self regard. Madina (1981) concurs with this point of view by describing the battering man as having weaknesses that are frequently masked behind a facade of exaggerated masculinity complete with dependency conflicts, abandonment, anxieties, feelings of inadequacy, inferiority, personal failings and helplessness.

The therapists in Coleman's (1980) study believe that in devaluing their wives, the men avoid their own feelings of dependence and although he wants to be valuable to his wife, sees his major role in the family as that of breadwinner and ultimate decision maker with little responsibility for the emotional climate of the family.

In terms of clinically treating the men individually, Coleman (1980) stresses the delicacy of working with people who have intense feelings of dependency and inadequacy which are masked by a facade based on denial. The therapist has to recognize the men's fear and embarrassment that can accompany the expression of long-repressed feelings of loneliness and fright. Violence erupts when the man feels stripped of his defenses.

Gondolf (1985) describes a program for abusive men called RAVEN (Rape and Violence End Now). The men in their sample are described as having been over socialized into a traditional male role predicated on control. The men in this program exhibited more rigidity than outright aggressiveness or hatred of women. This personality trait appears to have been the outgrowth of severe discipline rather than a reaction to domineering mothers.

The abusive men's control was manifested in three ways according to Gondolf (1985). One, an excessive regulation of one's own behaviour and feelings; two, an overbearing responsibility for others; and three, a privilege of being in authority. The author goes on to state that there is also clear evidence that the male sex role stereotype contributes and may make all men potential batterers.

The Battered Woman

A wealth of material has been obtained from studies of women in abusive relationships. Perhaps one of the most influential pieces of work, especially from a therapeutically applicable

perspective, has been the description of the three-stage cycle of violence by Lenore Walker in her book The Battered Woman (1979).

Work by Dobash and Dobash (1979) has also set the stage for a more meaningful approach to the study of family violence. In their work, Dobash and Dobash (1979) describe the woman's self-blame as an attempt to comprehend the violence. She tries to see her own 'guilt', and both to forgive her husband, for perhaps merely overreacting, and to seek a solution by changing her behaviour so as to give him no further reason for hitting her.

Roy (1977) believes the battered spouse is a likely counterpart to the batterer in that these women exhibit many similar underlying psychosocial traits, including histories of violent experiences as children, dependency conflicts, and a narrow range of coping responses. Having personally experienced violence as well as societal pressure to be submissive make battered women less apt to escape their situation (Weitzman and Dreen, 1982). Furthermore, Weitzman and Dreen (1982) suggest that many battered women withdraw under stress and that this is a response which "reflects an apparent difficulty with self assertion and an internalized helplessness rooted in early life experiences, which, increases dependence on already dependent-phobic partners" (p. 260).

Weitzman and Dreen (1982) also report that a significant number of other abused women report being in a state of near-chronic agitated depression, easily threatened or rejected.

Many of these women take responsibility of their spouses' feelings and react defensively to any problems which their spouses present. Accordingly, these women tend to be more verbally assaultive than clinging and withdrawn.

The Violent Couple as a Couple

To date, relatively little has been written on violent couples. What is known has been deduced from data based on studies of women or men and couple aggregate data (Szinovacz, 1983). Since the 1980's there has been a growing acceptance of studies which focus on understanding the violent couple as opposed to earlier studies of victims and perpetrators (Taylor, 1984; Weitzman and Dreen, 1982).

Minuchin (1984) puts the study of violent relationships into perspective when he states that "Focusing on the male as a monster makes people experience their individual separation, and perpetuates defensive aggression as a response to aggression. The goal should be to explore and improve people's interdependence" (p. 175). Gelles (1972) in a much earlier statement also declared that "the prolonged interaction, intimacy, emotional closeness and intense investment of self in family life exposes the vulnerability of both partners and strips away the facade that might have been created to shield the personal weaknesses of husbands and wives". (p. 164).

The emphasis on looking at violent relationships has been mostly systemic in nature (Giles-Sims, 1983; Taylor, 1984 and Weitzman & Dreen, 1982). Margolin (1979) who studied violent couples to enhance anger management believed that a careful exploration of a couple's history with violence would reveal that both spouses contributed to the escalation of anger with one spouse being more verbally assaultive while the other being the more physically abusive. This placed each partner in the role of both abuser and victim.

In other work, Hoffman (1981) cites the unpublished work of Berman, Pitman, and Raliff who say that the cycle of spouse abuse is characterized by an "overadequate" spouse who is the abused on and an "underadequate" spouse who is the abuser. Hoffman (1981) goes on to say that the abuser feels inferior to his wife who is also very insecure and needs a man who is dependent on her. When the one-down spouse feels too low in the relationship to some "overly independent" behaviour on the part of the more adequate spouse, an episode of physical abuse may be triggered which re-equilibrates the relationship and is accepted in some way by the abused one.

Taylor (1984) bases his use of conjoint treatment of spouse abuse upon five theoretical assumptions: 1. the abusive behaviour is learned behaviour; 2. a violent relationship becomes a violent system; 3. the abuser role and the victim role are not all-encompassing roles but do grow in power and intensity over time;

4. that stress and anger are closely interrelated within violent systems and that such stress/anger cycles can be interrupted; 5. that abusing systems created and are sustained by negative interactions and attitudes.

Neidig and Friedman (1985) on the other hand, believe that violence is a desperate effort to achieve a relationship change which may be effective in the short run but is almost always self-defeating in the long run. In their treatment of violent couples it is assumed that violence is primarily a function of the couple rather than the result of the man's belief that he has the right to beat a woman. Focus, therefore, is not on attitude change but on skill, acquisition and behaviour change.

Another significant contribution to a systemic formulation of family violence is the work of Weitzman and Dreen (1982). They believe that violence exists in some systems because it is a learned behaviour and because the relationship rules which govern all marital systems and behaviour are markedly more rigid among violent couples. This inflexibility is recognized by sexual polarization, narrowing coping responses and a high degree of enmeshment so characteristic of these couples, which makes the couple poorly adapted to the inevitable problems of stress and change in marriage. Weitzman and Dreen (1982) describe violent couples as locked into a complementary system with rigid unilateral control and no room for negotiation. If the system remains unchallenged, violence can be avoided but any move toward a more

symmetrical relationship threatens the homeostasis, and violence erupts to reestablish the complementarity.

Summary

A review of the literature pertaining to conjugal violence has been presented in detail in this chapter. An emphasis has been placed on understanding the individual within the abusive relationship as well as understanding the dynamics of the abusive relationship itself. A review of the various theoretical positions has been outlined. Particular emphasis has been placed on general systems theory as lending support to the present study.

CHAPTER III

THEORETICAL FRAMEWORK AND RELATED LITERATURE:

THE CIRCUMPLEX MODEL

Overview

A review of the literature on spouse abuse has provided a framework for an understanding of the direction which research has taken in this area. In terms of the present research, the Circumplex Model provides a conceptual framework within which to study violent and non-violent couples. This model provides the basic theoretical underpinnings for the study of family and couple functioning as related to cohesion, adaptability and communication. Its strengths as a model of family functioning include its theoretical salience, integrative nature, clinical relevance, and empirical validation.

The Circumplex Model

The Circumplex Model has been a promising attempt at unifying the myriad conceptualizations of family systems theorists. Olson, et al., 1983; Olson, Sprenkle & Russell, 1979 clustered more than 50 concepts from the family therapy and family research literature and postulated three dimensions of family behaviour: cohesion, adaptability, and communication.

Cohesion is defined as "the emotional bonding that family members have toward one another" (Olson et al., 1983, p. 48).

Within the Circumplex Model, some of the specific concepts used to

measure cohesion are: emotional bonding, boundaries, coalitions, time, space, friends, decision making and interests and recreation. There are four levels of cohesion ranging from disengaged (very low) to separated (low to moderate) to connected (moderate to high) to enmeshed (very high) (Olson et al., 1983). A summary of the subtopics comprising family cohesion is provided in Table 1.

Adaptability is defined by Olson et al. (1983) as "the ability of a marital or family system to change its power structure, role relationships, and relationship rules" (p. 48) in response to situational and developmental stress. Descriptors in this category include: family power, assertiveness, control, discipline, negotiation styles, role relationships and relationship rules. As with the cohesion dimension, the four levels of adaptability also range from very low to very high with rigid at the very low extreme and chaotic at the very high extreme. The moderate levels of adaptability are structured and flexible. A summary of the variables comprising adaptability is presented in Table 2.

Appendix G illustrates the two dimensions and the four levels of cohesion and adaptability. Combining the dimensions, the Circumplex Model identifies and describes sixteen distinct types of marital and family systems. The more central types of the model are the most common but it is hypothesized that couples and families having problems fall most frequently into the extreme types. On the dimension of cohesion, for example, the extremes of

Table 1

Family Cohesion Dimensions (Olson, D. & McCubbin, H. 1982)

	DISENGAGED (Very Low)	SEPARATED (Low to Moderate)	CONNECTED (Moderate to High)	ENMESHED (Very High)
Emotional Bonding	Very Low	Low to Moderate	Moderate to High	Very High
Independence	High Independence of family members.	Moderate Independence of family members.	Moderate dependence of family members.	High dependence of family members.
Family Boundaries	Open external boundaries. Closed Internal boundaries. Rigid generational boundaries.	Semi-open external and Internal boundaries. Clear generational boundaries.	Semi-open external boundaries. Open external boundaries. Clear generational boundaries.	Closed external boundaries. Blurred Internal boundaries. Blurred generational boundaries.

(Table continues)

Table 1 continued

Emotional	DISENGAGED (Very Low)	SEPARATED (Low to Moderate)	CONNECTED (Moderate to High)	ENMESHED (Very High)
Coalitions	Weak coalitions.	Marital coalition clear.	Marital coalition strong.	Parent-child coalitions, usually a family scapegoat.
Time	Time apart from family maximized (physically and/or emotionally).	Time alone and together is important.	Time together is important. Time alone permitted for approved reasons.	Time together maximized. Little time alone permitted.
Space	Separate space both physically and emotionally is maximized.	Private space maintained; some family space.	Family space maximized. Private space maximized.	Little or no private space at home.

(Table continues)

Table 1 continued

	DISENGAGED (Very Low)	SEPARATED (Low to Moderate)	CONNECTED (Moderate to High)	ENMESHED (Very High)
Emotional				
Friends	Mainly individual friends seen alone. Few family friends.	Some individual friends. Some family friends.	Some individual friends. Scheduled activities with couple and family friends seen together.	Limited individual friends. Mainly couple or family friends seen together.
Decision Making	Primarily individual decisions.	Most decisions are individually based, able to make joint decisions on family issues.	Individual decisions are shared. Most decisions made with family in mind.	All decisions, both personal and relationship must be made by family.
Interests and Recreation	Primarily individual activities done without family. Family not involved.	Some spontaneous family activities. Individual activities supported.	Some scheduled family activities. Family involved in individual interests.	Most or all activities and interests must be shared with family.

Table 2

Family Adaptability Dimensions (Olson, D., & McCubbin, H., 1982)

	Assertiveness	Control	Discipline	Negotiation	Roles	Rules	System Feedback
CHAOTIC	Passive and	Limited	Laissez faire.	Endless nego-	Dramatic	Dramatic	Primarily
(Very High)	Aggressive	leadership.	Very lenient.	tations. Poor	role shifts,	rule shifts,	positive loops;
	styles			problem-solving.		Many implicit	few negative
						rules. Few	loops.
						explicit	
						rules.	
						Arbitrarily	
						enforced rules.	

(Table continues)

Table 2 continued

	Assertiveness	Control	Discipline	Negotiation	Roles	Rules	System Feedback
FLEXIBLE (High to Moderate)	Generally Assertive.	Egalitarian with fluid changes.	Democratic. Predictable consequences.	Good negotiation; good problem-solving.	Role making and sharing. Fluid change of roles.	Some rule changes. More explicit than implicit rules. Rules usually enforced.	More positive than negative loops.
STRUCTURED (Moderate to Low)	Generally Assertive.	Democratic with stable leader.	Democratic. Predictable consequences.	Structured negotiations; good problem-solving.	Some role sharing.	Few rule changes. More explicit than implicit rules. Roles usually enforced.	More negative than positive loops.

(Table continues)

enmeshment represent overidentification so that loyalty to and consensus within the family prevent individuation of family members. At the other extreme (disengaged), high levels of autonomy are encouraged and family members "do their own thing with limited attachment or commitment to their family" (Olson et al., 1983). As with cohesion, it is hypothesized that families or couples having problems fall more frequently into the extreme areas.

Communication, the third dimension in the Circumplex Model, is considered to be the facilitating dimension and is considered critical to movement on the other two dimensions. Communication is not included graphically in the model.

Positive communication skills enables couples and families to share with each other their changing needs and preferences as they relate to cohesion and adaptability. Negative communication skills minimize the ability of a couple or family members to share their feelings and, thereby, restrict their movement on these dimensions.

Related Family Literature

The Circumplex Model of Family functioning (Olson et al., 1979) was developed with General System Theory (Bertalanffy, 1968) providing the basic tenets. There are many similarities between the Circumplex Model and other family typologies. Kantor and Lehr's (1975) basic functioning family types of closed, random and open systems contain similar constructs to those in the Circumplex Model. Wertheim (1973) has formulated family systems in terms of

structural and process variables related to morphostatic (system stability) and morphogenetic (system change) dimensions. Beavers and Voeller (1983) present a cross-sectional process model with three levels of family organization: centripetal, mixed, and centrifugal, which implies a continuum of growth from less to more workable structures. Recently, Hoffman (1981) has presented an evolutionary model depicting family organization in spiral formations. She also incorporates ideas related to cohesion and adaptability but postulates the need for discontinuous change within the paradigm.

One of the major criticisms leveled against the Circumplex Model has come from Beavers and Voeller (1983). They suggest that Olson's definition of cohesion eliminate the concept of individual autonomy which is not a system's concept. Given these changes, Beavers and Voeller (1983) state that "the Circumplex Model can approximate a systems-oriented model" (p. 89).

Olson, Russell, and Sprenkle (1983) responded to the Beavers and Voeller (1983) critique by contending that both models are built on principles derived from general systems theory. In defense, they claim that the Circumplex Model builds on the concept of "systemic change" on the continuum from morphogenesis (continued change) to morphostasis (no change). The Beavers Model, however, builds on the concept of "systemic growth" on the continuum from entropy (death of system) to negentropy (system growth). Olson et al. (1983) also contend that using the adaptability dimension as a

curvilinear function is more in tune with systems theory than postulating it as a linear relationship as the Beavers System does. Olson et al. (1983) concurred with the criticism on the use of personal autonomy and revised their definition of family cohesion to read: "the emotional bonding members have with one another" (p. 80).

In a co-authored article, Beavers and Olson (1983) state that: The Olson group addresses the problem with the strength of a solid research orientation and capability; the Beavers group approaches the assessment issue from a primarily clinical base (p. 97).

Both agree that the dimension of adaptability and cohesion are salient ones and both are concerned with bridging theory, research, and clinical practice. Their differences on how to use the dimension of adaptability will be more clearly understood by future research on these models. For the purposes of this study, however, the position of Olson's group is considered more conceptually sound.

To date, many empirical studies have been aimed at validating the Circumplex Model. One of the earlier studies (Russell, 1979) compared 31 families with adolescents that were divided into high and low functioning groups. As hypothesized, high functioning families had moderate scores on family adaptability and cohesion, and low functioning families had extreme scores on these two dimensions. In a study of clinic and non-clinic couples, Sprenkle

and Olson (1978) focused exclusively on the adaptability dimension in couples but also considered the facilitating concepts of support and creativity. They found that clinic couples had more extreme scores on leadership and were generally wife-led. A combination of high-support and equalitarian leadership was especially characteristic of non-clinic couples.

The Circumplex Model has been empirically studied using families and couples presenting a variety of symptoms in therapy. Olson et al. (1983) report on studies by several people who have used their Circumplex Model. Portner (1981), studying clinic and non-clinic families with one adolescent found the clinic families to lean more toward the chaotic disengaged extreme type (30%) with fewer non-clinic families at the extreme (12%). Bell (1982) studied families with runaways using FACES and found families with runaways to be more extreme on the model than the non-clinic sample.

One of the basic assumptions of the Circumplex Model is that the two dimensions in the model are independent. Russell (1979) reports on two studies that utilized self-reports and behavioural measures of both cohesion and adaptability. Factor analysis revealed that measures of these dimensions loaded on separate factors. Hence, the independence of the two dimensions was empirically demonstrated and validated.

Cohesion has been shown to be a salient concept in the field of family therapy (Olson et al. 1979). Though the importance of

this dimension has been demonstrated, various formulations of the concept have been proposed by family therapists and theorists. Minuchin (1974) and Minuchin and Fishman (1981) have described extremely low levels of cohesion as disengagement and extremely high levels of cohesion as enmeshment. Bowen (1961) termed similar concepts as emotional divorce or emotional fusion and undifferentiated ego mass. Others have identified the concept as pseudo-mutuality (Wynne, Ryckoff, Day, & Hirsch; 1985), centripetal and centrifugal forces (Stierlin, 1974) and consensus sensitive families (Reiss, 1971).

Family sociologists have also identified the importance of cohesion in their work. Very early in the family literature, Angell (1936) and Hill (1949) both combined the variables of "adaptability" and "integration" to assess dynamic stability in families under stress. Hess and Handel (1959) used the dimension, calling the extremes "separateness" and "connectedness" as the central theme of their middle range theory of behaviour. More recently, Rushing (1969) identified family solidarity by the dimensions of associational integration, affectual integration, consensual integration, functional integration, normative integration, and goal integration. Olson et al. (1979) state that these dimensions are similar to their family cohesiveness.

One of the major contributions of general systems theory (von Bertalanffy, 1968) to the family field is that it has demonstrated the value of system adaptability. The adaptability dimension has

been studied as a significant factor in understanding success in coping with the stress of unemployment (Angell, 1936); adjustment to war and separation (Hill, 1949), and family stress (McCuffin, Ross, Wilson, & Lester (1979). In addition, Van de Veen (1976) demonstrated empirically that cohesion and adaptability are underlying dimensions in assessing family behaviour.

Much of the earlier theorizing about family systems viewed families as primarily morphostatic (Haley, 1959, Satir, 1964). In Haley's (1959) first law of relationships, he states: "When an organism indicates a change in relation to another, the other will act upon the first so as to diminish and modify the change" (p. 281). Current views of the family are more focused on growth and development and hypothesize that both morphogenesis (change) and morphostasis (stability) are necessary for a viable family system. Olson et al. (1983) postulate that morphogenesis and morphostasis are extremes on the adaptability dimension and that both extremes are dysfunctional to families if they can only function at the extremes. It is hypothesized that high systems functionality is a balance between morphogenesis and morphostasis. This position is in agreement with Wertheim (1973) who states:

Without some optimal degree of morphostasis, the family system could not survive as a cohesive, viable social unit. Extreme morphogenesis, tantamount to constant change, would preclude building up even a minimal set of common meanings, values and

expectations, essential for communication and the survival of an intimate, face-to-face group (p. 365).

Olson (1979) hypothesized that when there is a more free flowing balance between morphogenesis and morphostasis there will be a mutually assertive style of communication; egalitarian leadership; successful negotiation; positive and negative feedback loops; role sharing and role making; and rule making with few implicit rules and more explicit rules. Conversely, dysfunctional family systems will fall at the extremes of these variables. This is highly compatible with Wertheim (1975) who states:

An ideal, adaptive family system can be conceptualized by an optimal, socio-culturally appropriate balance between stability-promoting, 'self-corrective' processes, or morphostasis and change-promoting, 'self-directive' processes, or morphogenesis (p. 286).

Relationship Between Conjugal Violence and the Circumplex Model

For the purposes of the present study, the dimensions of cohesion and adaptability appear to be conceptually sound and are therefore central to studying couples who have violence as an on-going part of their relationship. As an extension to the review of the literature on violence within the family, as well as consideration of the basic tenets of the Circumplex Model of Family Functioning, several questions may be posed:

Can the Circumplex Model distinguish self-reported violent from non-violent couples?

Does violence in a relationship contribute to the classification of couples as more extreme types?

Are cohesion and adaptability levels related to outcome in therapy for violent and non-violent couples?

Is there a significant correlation between the level of violence in a couple's relationship and success in therapy?

Is the couple's perceived marital intimacy a contributing factor to therapeutic outcome?

Do the self-reported measures of couple characteristics combine in a way that is predictive of outcome in therapy?

From these questions, the following research questions have been structured:

Research Questions

1. Are there characteristics of violent couples that are predictive of outcome in therapy?
2. Will violent couples experience less therapeutic success than non-violent couples?
3. Will Violent couples be classified as being rigidly enmeshed on the Circumplex Model as measured by the FACES III instrument?

Summary

A comprehensive review of the literature on the Circumplex Model of Family Functioning has been presented in this chapter. The significance of the Circumplex Model, as being conceptually sound and as being an appropriate conceptual framework for

understanding marital functioning, has been established. Important research questions have been posed relating the Circumplex Model to conjugal violence. An outline of the methodology and research procedures are provided in Chapter IV.

CHAPTER IV
METHODOLOGY AND RESEARCH PROCEDURES

Overview of Couple-Data Research

Much of the early research on marital violence has been carried out by women. A criticism of these studies is that a predominant perspective in the research has come from women, some of whom have been victims of battering themselves (Cook & Frantz-Cook, 1984). The present author believes that these criticisms, which appear to be aimed at discounting studies based on gender, underscore many important theoretical and empirical contributions by women in the area of family violence. Giles-Sims' (1983) application of general systems theory to an understanding of wife battering and Walker's (1979) formulation of the cycle of violence are but two important contributions. Giles-Sims (1983) recognizes the limitations of not including the man's perspective in her research. She stated that pre-selection of variables for her research was guided by theoretical paradigms and emphasized that many dominant theoretical paradigms have been very prejudicial to women. She cites Chesler (1971) who analyzed women's problems as the result of an inability to adjust to the female role rather than the female role being the problem. An earlier study by Snell, Rosenwald and Roby (1964) also gives a more blatant example of one-sided focus in the study of family violence. They studied 12 husbands and wives who had long histories of violent interaction.

They interviewed both husband and wife but focused more on the wife and her role in perpetuating, or essentially causing the abuse. Their conclusion was that the women were aggressive, were sexually frigid, and/or masochistic. Giles-Sims (1983) concludes that the Snell et al. (1964) study implies that these women characteristics were reason enough for any man to assert himself through violence. Further reaction to this criticism has also led to the establishment of methods of treating the male abuser but Cook & Frantz-Cook (1984) point out that there is something much more powerful happening within the marital system which serves to maintain the recurrent cycle of violence.

In a recent article Szinovacz (1983) discusses the use of couple data as a methodological tool in the study of marital violence. She distinguishes between aggregate data based on husbands and wives from different marriages and couple data based on husbands and wives from the same marriage and provides a clear rationale on why aggregate husband-wife data cannot substitute for couple data.

Szinovacz (1983) states that in cases where self-reports of behaviours are not easily observable, as in the case of marital violence, couple data can be used as a basis for more accurate estimates of the frequency and distribution of the behaviours among specific population groups than is possible with aggregate husband-wife data. In addition, couple data may serve to estimate the effect of systematic response biases on relationships with other

variables. The present study is based on self-reported behaviours from couples. It is expected, therefore, that individuals will be more likely to respond in a more accurate manner, knowing that their spouse is also reporting on the same behaviours. Using couple data in the present study should also help reduce the variability of responses because of response biases.

It has been recognized in the literature that studying only one partner's perspective in a relationship denies the complexity of the marital system (Larson, 1974; and Olson & Rabunsky, 1972). In order not to introduce systematic bias, by only studying one partner's perspective of the relationship, Thompson and Walker (1982) believe in the importance of studying the dyad as the unit of analysis. This unit of analysis is the relationship itself.

In 1942, Becker and Useem defined the dyad: "Two persons may be classified as a dyad when intimate, face-to-face relations have persisted over a length of time sufficient for the establishment of a discernable pattern of interacting personalities" (p. 13). This implies that the dyad is extended into time and is enduring, that there must be patterned mutual action and that the dyad engages personal elements of the two participants (Thompson & Walker, 1982).

Levinger and Snoek (1972) add that a dyad goes beyond unilateral awareness and surface contact and that there must be a mutuality for a dyad to exist. "Mutuality marks a continuum of states in which each partner's action and attributes are markedly

influenced by the other's actions, views, and experiences in the relationship" (p. 5).

The purpose of the present research was to create data that would reflect characteristics of the couple as a unit. This is referred to as dyadic research (Thompson & Walker, 1982) or "relational" data (Fisher, Kokes, Ransom, Philips & Redd, 1985). Fisher et al. (1985) state that individually based scores reflect only the action of a single member of a family system. "Relational" data takes two or more individual data sets and creates a new score representing a previously defined characteristic of the contributing individuals combined score. This combination of scores derives a score that reflects some score attribute or characteristic of the family or couple unit. This data can be used to yield descriptive statements about the couple.

The present study took into account couples' self-reports about their relationship. Olson (1977) refers to this as "insiders" perceptions as distinguished from "outsiders" perceptions, which refers to external observation of couple interaction. Gurman and Kniskern (1981) stress that neither of these techniques of data collection is superior to the other or even more objective, but that each provides valuable information of the whole from different perspectives.

Description of Sample

The sample for this study was drawn from all couples who applied for couple counselling at Family Services Association of

Edmonton from December, 1986 to November, 1987. As part of the intake procedure, these couples were asked to participate in the present research and filled out a number of questionnaires before they began therapy. All couples who had physical violence in their relationship in the past year were used in the present study. Couples who had not had physical violence in their relationship were used as a comparison group. Physical violence was defined as any act "carried out with the intention of physically hurting another person. This physical hurt can range from slight pain, such as one would experience by being slapped, to severe physical abuse and murder" (Gelles & Straus, 1979, p. 554).

Procedure

When couples applied for counselling at Family Services Association, they were invited by an intake worker to participate in a research project on couples which would take approximately one hour of their time. They were then placed on the agency waiting list which was generally from two to three weeks long. When the couple was later contacted by the intake worker, they were again invited to participate in the research project in the following standardized manner:

At present we are conducting research at Family Services Association, which will give us a better understanding of couples who apply for counselling. We are asking therefore, that for your first meeting, you come in for a period of two hours. When you arrive you will be asked to fill out some

questionnaires which are designed to give us information about your relationship as a couple. You will only be charged a fee for one hour, not the two hours you will be here.

When the couple arrived for the initial intake session, they were asked to read and sign a document stating their willingness to participate in the research (Appendix A). This was witnessed by the receptionist who then seated the couple in a large room with a minimum of three meters of distance between them. The couple, individually, filled out the questionnaires (Appendix B) and returned them to the receptionist. At this point, the receptionist recorded the couple's name, date of intake, and therapist's name for further follow up.

At the end of eight weeks, the couple and therapist were given a short questionnaire (Appendix F) to complete. The therapist was requested to terminate the eighth week session five minutes early so that all participants, the couple and the therapist, could complete the questionnaire. When completed the questionnaires were given to the receptionist by the individual participants. All forms were then forwarded to the researcher.

At the end of the two-month follow-up period, an attempt was also made by the intake worker to contact all couples who terminated therapy without completing the follow-up questionnaire. When contacted, the following questions were asked: 1) What was the reason for you and your partner ending therapy? 2) Have you and your partner gone elsewhere for counselling? 3) Are you and

your partner still living together? 4) Do you have any comments about your counselling at Family Service Association? and 5) Would you and your partner be willing to fill out a follow-up questionnaire that we would mail out to you?

At the request of the agency, questionnaires were only sent to those who were contacted and who agreed to the follow-up. At the end of a two week period, a second phone call was made to those couples who had not returned their questionnaires.

Research Instruments

For the purpose of this study, the following research instruments were used: a. Family Adaptability and Cohesion Evaluation Scales (FACES III); b. Personal Assessment of Intimacy in Relationships (PAIR); c. Conflict Tactics Scale (CTS). These instruments were selected because of their empirical validation of the Circumplex Model of family functioning as well as their apparent utility in measuring relationship characteristics specific to the purposes of this research.

FACES III

The Family Adaptability and Cohesion Evaluation Scales or FACES III (Olson, Portner & Lavee, 1985) was used in the present study. FACES III is the third version in a series of FACES scales developed to assess the two major dimensions of cohesion and adaptability on the Circumplex Model. Olson (1986) states that FACES III has been revised several times to increase its reliability, validity and clinical utility. Olson et al. (1985)

also emphasize that the FACES III was also developed in order to overcome some of the limitations of FACES II which were: a. to shorten the instrument so it can be administered under perceived and ideal conditions; b. to develop two empirically independent (orthogonal) dimensions so it better achieves the theoretical criteria for a Circumplex Model; c. to eliminate negative items so it is easier to score and compare to established norms; d. to rewrite the ideal version so that it could be more easily understood by family members; e. to develop items that were relevant for a variety of family forms (nuclear, blended, single parent) and couples (married, cohabited) without children; and f. to have specific norms for adults across the life cycle, adults and adolescents combined for the adolescent stage, and young couples without children.

FACES III is a 20-item scale developed from items used in a national survey of 1,000 "normal" families (Olson, McCubbin, Barnes, Larsen, Muxen, & Wilson, 1983). In its present form, FACES III has considerably reduced the cohesion and adaptability correlation ($r=.03$) and has reduced the correlation between adaptability and social desirability to zero ($r=.00$) (Olson, 1986). This is important because social desirability has an impact on most self-report scales.

FACES III is a self-report measure with items which are easily read and understandable down to the age of 12 years old (Olson et al., 1985). Since it is designed to measure both perceived and

ideal descriptions of a marital and family system, the 20-item questionnaire is taken twice, first for perceived and second for ideal descriptions of the couple. The perceived-ideal discrepancy is an indirect measure of couple satisfaction. The greater the ideal-perceived discrepancy, the less the couple satisfaction (Olson et al., 1985).

The items on FACES III consist of statements requiring responses on a 5-point Likert scale ranging from "almost never" to "almost always", referring to the frequency the described behaviour occurs in the couple relationship. Scoring of FACES III, as outlined in the manual (Olson, et al., 1985), allows for separate scores for cohesion and adaptability as well as a combined score. Norms and cutting points for the four levels of cohesion and adaptability were established for a. adults (parents) across the family life stages, b. families with adolescents, and c. young couples. Based on a sample of 2,453, norms for adults are provided with a mean score of 39.8 (standard deviation of 5.4) for cohesion and a mean score of 24.1 (standard deviation of 4.7) for adaptability.

Reliability and validity data for FACES III is provided in the manual for a sample of 2,412 individuals in a national survey. The reliability, using Cronbach Alpha, for each scale (cohesion and adaptability) was computed by splitting the total sample into two random and independent samples. The Cronbach Alphas, for equal subgroups are: Cohesion, .76 and .75; adaptability, .58 and .63.

The Cronbach Alphas, for the total sample are .77 for cohesion, .62 for adaptability, and .68 for the total scale. Olson et al. (1985) explain that the somewhat lower reliabilities on adaptability is due to the large number of concepts used to adequately represent the complexity and richness of this dimension.

In terms of validity for FACES III, the manual reports a reduction of the correlation between cohesion and adaptability from $r=.65$ on FACES II to $r=.03$ on FACES III resulting in two clearly independent dimensions. Another indication of the construct validity of the two scales is the high correlation of the items within each scale with the total scale. Results of the factor analysis indicate that the 10 cohesion items are all highly correlated with the total score on cohesion and the 10 adaptability items all correlate highly with the total adaptability score.

A second validity criteria was to reduce the correlation of cohesion and adaptability with social desirability. This was reduced to zero for adaptability and social desirability but reduced only marginally for cohesion and social desirability ($r=.35$). The authors explain that because high cohesion is a characteristic that is more embedded into our culture as an ideal for families, it was not desirable to reduce this correlation.

Because FACES III is a newly revised version of FACES II, studies testifying to its clinical and empirical improvements have yet to be published. Research using FACES and FACES II has provided convincing evidence for their use as reliable instruments

in studies of clinical and non-clinical families (Russell, 1979) high risk families (Garbarino, Sebes, & Schellenback, 1984), Schizophrenic and neurotic families (Clarke, 1984), alcoholic families (Olson & Killorin, 1985; Bonk, 1984), sex offenders (Carnes, 1985), and adolescent juvenile offenders (Rodick, Henggeler, and Hanson, 1985).

PAIR

The second instrument which was used in the present study is the PAIR, an acronym for Personal Assessment of Intimacy in Relationships (Schafer & Olson, 1981). PAIR measures the expected versus realized degree in five areas of intimacy: emotional, social, sexual, intellectual, and recreational. The PAIR attempts to identify the degree to which each partner presently feels intimate in various areas of the relationship (realized) and to identify the degree to which each partner would like to be intimate (expected).

Olson (1975, 1977)), in identifying the types of intimacy focused on "process" aspects of distinguishing between intimate experiences and an intimate relationship. An intimate experience is a feeling of closeness or sharing with another in one or more of the five areas. It is possible to have intimate experiences with a variety of persons without having or developing an intimate relationship (Olson, 1972). Olson, (1977) also believes an intimate relationship is generally one in which an individual shares intimate experiences in several areas, and there is the

expectation that the experiences and relationship persist over time.

In terms of administration of the PAIR, each partner independently responds to the questionnaire in two consecutive steps. In the first step, the partner responds to the item "as it is now" (perceived) and in the second step the individual responds "how he/she would like it to be" (expected). There are 36 items on the questionnaire and each partner indicates their agreement-disagreement on a 5-point Likert scale.

Reliability and validity of the PAIR questionnaire are reported by Schaefer and Olson (1981). Validity and reliability analysis of the PAIR was done on a sample of 192 couples who have been married between one and 37 years (mean length of marriage=35.3, SD=8.3), ranging in age from 21 to 60 years old (mean age=35.3, SD=8.6). With 9% having been formerly married, and 55 % having more than a high school education (mean years of education=14.1, SD=2.2). Other instruments used in the analysis included the Locke-Wallace Marital Adjustment Scale (Locke & Wallace, 1959), an adapted version of one of Jourard's "Self-disclosure" Scales (Jourard, 1964), and "Empathy" Scale developed by Truax and Carkhoff (Truax & Carkhoff, 1967), and six of the Moos' ten "Family Environment Scales" (Moos & Moos, 1976).

All the PAIR subscales except for the spiritual subscale positively correlate with the Lock-Wallace with coefficients consistently exceeding .30. The most consistently high

coefficients were with the Emotional, Intellectual and Recreational Intimacy. With the Moos' Family Environment Scale every PAIR subscale correlated significantly in the positive direction.

In a validity study of the Waring Intimacy Questionnaire (Hanes & Waring, 1979) and the PAIR, Schaefer & Olson, (1981) found that the two scales were significantly related ($r=.77$; $p<.01$).

Reliability testing consisted of a split-half method of analysis. All of the six scales have impressively strong Cronbach's Alpha Reliability Coefficients of at least .70.

Conflict Tactics Scale

To get a measure of violence within the relationship of the couples to be sampled, the Conflict Tactics Scale (CTS) (Straus, 1974) was used. The CTS is used to measure three modes of dealing with intrafamily conflict: (1) Reasoning: the use of rational discussion and argument; (2) Verbal Aggression: the use of verbal and symbolic means of hurting - such as insults or threats to hurt the other; and (3) Violence: the actual use of physical force (Straus et al., 1980). The items on the CTS start with those low in coerciveness (such as discussing the issue with the other) and gradually become more coercive and aggressive towards the end of the list (such as slapping and hitting). Straus et al. (1979) believe this sequence enhances the likelihood that the person will become committed to the interview and continue answering the questions.

The CTS was modified by Straus (1979) to be used in a face to face interview. The present study used the CTS as a self-administered questionnaire. In a recent study of marital violence (Szinovacz, 1983) the CTS was used both as a self-administered questionnaire given at the end of the entire interview and as a face-to-face questionnaire. Subjects did not refuse to answer the violence questions or complain about the sensitivity of the topics. Since the CTS was administered relatively late in the interview and within the context of other questions dealing with conflict, power strategies, and power relations, Szinovacz (1983) stated that the CTS appeared as a natural part of the study.

Reliability and validity of the CTS are reported in Straus et al. (1980). The internal consistency reliability of the CTS was examined by two techniques: item analysis and the alpha coefficient of reliability. The mean item total correlation is .87 for the Husband-to-Wife Violence index and .88 for the Wife-to-Husband Violence index. These figures are based on a study of 385 couples (Straus, 1979). In a sample of 2,143 couples (Straus et al, 1980) the Alpha coefficients are .83 for the Husband-to-Wife Violence index, .82 for the Wife-to-Husband Violence index, and .88 for the Couple Violence index.

Straus et al. (1980) state that the violence items on the CTS have a degree of "face" or content validity since they all describe acts of actual physical force being used by one family member on another. In terms of construct validity, Straus et al. (1980)

provide examples of meaningful results obtained with CTS data:

1) There is a consistency between findings using the CTS and a large body of evidence concerning the "catharsis" theory of aggression control (Straus, 1974). 2) The CTS are successful in obtaining high rates of occurrence for socially undesirable acts of verbal and physical aggression. These high rates are consistent with previous in-depth interviews (Gelles, 1974). 3) The CTS data on the extent to which patterns of violence are correlated from one generation to the next (in Steinmetz, 1977) are consistent with previous findings and theory on familial transmission of violent behavior (Carroll, 197, p. 264).

Numerous other studies are also listed by Straus et al. (1980) to provide evidence of construct validity of the CTS.

Analysis of Data

The analysis of the data collected in this study was based on scores obtained from FACES III, the PAIR, and the CTS. Couple scores which were calculated from these instruments were utilized, in conjunction with background data, to generate variables that were descriptive of the couples under study. A discriminant function analysis was utilized to determine if there were characteristics of violent couples that differed from non-violent couples in terms of outcome in therapy. Because a large proportion of couples terminated therapy prematurely, outcome in therapy for this analysis was based on therapist reports only. The outcome measure was derived by multiplying the score obtained from the

therapist's report of progress in therapy with the therapist's report of anticipated outcome in therapy. This yielded a continuous score from a low of 1 (unsuccessful) to a high of 15 (successful).

Example

(A) Therapist report of progress 1 2 3 4 5

(B) Therapist report of outcome 1 2 3

Outcome measure = A x B

= 4 x 3

= 12

In a very recent study, Cline, Jackson, Klein, Majia, & Turner (1987) suggested that therapists' ratings have a degree of concurrent validity with other assessment measures and should be given serious consideration as one measure of client change or improvement.

Because of the large percentage of drop-outs from therapy, cross-tabulations were also used to assess which variables were most predictive of determining whether a couple would prematurely end therapy. Prematurely ending therapy included all couples who dropped out on their own accord and it was indicated by the therapist that the service was not completed. Couples who had terminated before the two month follow-up because of completed therapy were excluded from this particular analysis.

Because of the importance of yielding relationship variables for the present study, the next sections explain how couple scores are derived from the obtained data.

FACES III Couple Scores

To compute couple scores on FACES III, three scores were computed: a "couple distance from centre" (DFC) score, a "couple discrepancy" score (CDC), and a "couple means" score (CM).

The DFC is a linear score indicating the distance of the couple's cohesion and adaptability score from the centre of the Circumplex Model (Olson et al., 1985). The formulas for computing DFC scores for individuals, couples, and families is indicated in Table 3. Also indicated in Table 3 are the cutting points for determining where the score is within the balanced, mid-range, or extreme part of the model. Because the DFC score does not indicate direction on the Circumplex model, couple mean scores were also calculated for each couple on cohesion and adaptability and used in conjunction with the couple's DFC score in the data analysis. The couple means were determined by calculating the scores for each spouse on cohesion and adaptability and then taking the mean of those scores as the couple's score. Each individual score on cohesion and adaptability were graphically represented on the Circumplex Model. A couple was included in the analysis if they were in close proximity on the graph. Any couple that showed extreme discrepancies were excluded from the analysis. A graphic example is represented in Appendix G.

Olson et al. (1985) also assert, that in addition to couple mean scores, discrepancy scores are also important in the analysis

Distance From Center (DFC) of Circumplex Model: Individual, Couple, and Family Scores (Olson et al., 1985)

INDIVIDUAL DISTANCE

$$\text{FROM CENTER (DFC-I)} = \sqrt{(\text{Ind.Coh.} - 39.8)^2 + (\text{Ind.Adapt.} - 24.1)^2}$$

COUPLE DISTANCE

$$\text{FROM CENTER (DFC-C)} = \sqrt{(\text{CXC} - 37.8)^2 + (\text{CXA} - 24.3)^2}$$

FAMILY DISTANCE

$$\text{FROM CENTER} = \sqrt{(\text{FXC} - 37.8)^2 + (\text{FXA} - 24.3)^2}$$

CXC = Couple Mean on Cohesion

CXA = Couple Mean on Adaptability

FXC = Family Mean on Cohesion

FXA = Family Mean on Adaptability

Table 3 continued

Circumplex Types	INDIVIDUAL SCORES			COUPLE & FAMILY SCORES		
	Cutting		Percentages	Cutting		Percentages
	Parents	Adol.		Points	Points	
Balanced	<6	<7	47	49	<4.56	44.0 51.1
Mid-Range	>6<11	>7<13	42	41	>4.5<8.79	44.3 39.8
Extreme	>11	>13	11	10	>8.79	11.7 9.1

NORMS FOR PAGES III

	INDIVIDUALS		COUPLES		FAMILIES	
	Mean	SD	Mean	SD	Mean	SD
Cohesion	39.8	5.4	38.5	4.7	37.1	4.5
Adaptability	24.1	4.7	24.1	3.6	24.3	3.3

of FACES III. The CM score gives a reasonably accurate picture of the couple's position on cohesion and adaptability. The CDC is advantageous in accounting for considerable disagreement between individuals and gives a measure of satisfaction with the relationship. The formula for calculating the CDC and CM scores are in Table 4.

PAIR Couple Scores

Individual scores were calculated for five types of intimacy on the PAIR: emotional, social, sexual, intellectual and recreational. Couple scores were calculated by obtaining an average score on each type of intimacy. A discrepancy score was also used in conjunction with the mean score as a measure of agreement between individuals.

CTS Scoring

The items on the CTS which were used for analysis were k, l, m, n, o, p, q, and r (see Appendix D). Each of these items asks the respondent about specific acts of physical violence towards themselves and towards their spouse. The response category code values for the items making up each CT scale ranges from 0 to 6. The items k to r were weighted in accordance with the midpoints of the frequencies indicated by the response categories presented to

Table 4

Couple and Family Scores: Mean and Discrepancy Scores

(Olson et al., 1985)

COUPLE AND FAMILY MEAN SCORES

$$\text{Couple Mean on Cohesion} = \frac{HC + WC}{2}$$

$$\text{Couple Mean on Adaptability} = \frac{HA + WA}{2}$$

$$\text{Family Mean on Cohesion (Husband/Wife/Adolescent)} = \frac{HC + WC + AC}{3}$$

$$\text{Family Mean on Adaptability} = \frac{HC + WA + AA}{3}$$

COUPLE AND FAMILY DISCREPANCY SCORES

$$\text{Couple Discrepancy Score (CDS)} = \sqrt{(HC - WC)^2 + (HA - WA)^2}$$

$$\text{Husband-Wife Discrepancy (HWD)} = \sqrt{(HC - WC)^2 + (HA - WA)^2}$$

$$\text{Husband-Adolescent Discrepancy (HAD)} = \sqrt{(HC - AC)^2 + (HA - AA)^2}$$

$$\text{Wife-Adolescent Discrepancy (WAD)} = \sqrt{(WC - AC)^2 + (WA - AA)^2}$$

$$\text{Family Discrepancy Score (CDS)} = \frac{HWD + HAD + WAD}{3}$$

the respondent. To do this, the 0 to 6 scale was substituted with 0, 1, 2, 4, 8, 15, and 25 (Straus, 1979). Items k, l, and m are considered to represent mild forms of violence while n, o, and p are categorized as moderate and q and r as severe forms of violence. To more accurately represent the severity of violence in the relationship, each of the mild, moderate, and severe forms of violence are weighted 1, 2, and 3 respectively. After weighting for severity and frequency, a total violence score was attained for both partner's perceived violence in their relationship. This was done by summing the male respondent's reports of violence towards his spouse and his report of violence by her towards him. The same procedure was repeated for the female respondent. An estimated violence score was calculated by summing the violence attributed to each individual and dividing by 2. This yielded an estimated score for the male and an estimated score for the female. The sum of those two estimates gave the estimated violence in the couple's relationship which then could be compared to their individual scores.

Subjects in the present study were considered to be in a violent relationship if either one of the couple reported the use of violence. In a recent study, Szinovacz (1983) acknowledged the inadequacy of self-report measures to get an accurate picture of violence in relationships. The author pointed out that by asking both spouses, there is more pressure to acknowledge violent behaviours if they anticipate that their spouses are asked similar

questions. Szinovacz (1983) found couple's violence rates based on both spouses lead to an increase of about 50% over the husband's reported rates and of 20% over the wives reported rates (26% vs 36% and 30% vs 36%).

Summary

An overview of the couple-data research applicable to the present study as well as a description of the methodology used have been presented. An outline of the procedure used to calculate couple scores and a description of the analysis used in the study were explained. A discriminant function analysis was used to determine if there were characteristics of violent couples that were predictive of outcome in therapy.

CHAPTER V

INTERPRETATION OF DATA

Overview

A general description of test results and discussion of the research questions as well as other relevant findings are presented in this chapter. Emphasis has been placed, in the interpretation of the data, at the level of couple's relationship but detailed aggregate data is also presented to give the reader a thorough knowledge of the sample under study.

Discussion of Demographic Data

The present study consisted of intake data on 75 couples which represented approximately 70% of all couples who applied for counselling at the Family Services Association of Edmonton during a nine month period. Not all couples who applied for counselling were included in the study. Couples not included were: 1) those couples who were unable to come in for the initial two hour data-collection interview, 2) those couples who refused to participate, and 3) those couples who were assigned a therapist in either the southside or westend offices. In the latter case, lack of office personnel prevented the researcher from collecting intake data on these couples. No information was obtained from any couple who did not participate during the initial interview.

Intake data on the 75 couples revealed that a very high percentage of both males (82%) and females (76%) were in either

V
their first marriage (male=57%; female=54%) or their first common-law relationship (male=25%; female=22%). A larger percentage of females (24%) than males (13%) were in their second or more marriage whereas a similar proportion of both were in their second or more common-law relationship (male=5%; female=8%).

Of the couples studied, 83% had less than three children in the household. Of this percentage, 24% of the couples had no children, 29% had one child and 30% had two children. A much smaller percentage (17%) had between three and six children. Cohabitation and employment data revealed that the majority of couples (83%) had been living together for ten years or less with the largest proportion of couples (61%) having lived together for less than five years. Couples in the study which had at least one partner working was 80%. Out of this number, 37% were from households with both partners working; 26% had the male working but the female not, and; 17% had the female working but the male not. 20% of the couples completing intake forms had neither partner working. On an aggregate basis, 54% of the females in the sample were employed compared with 68% of the males employed.

Couple data on education revealed that males and females in the study were similar in the amount of education received. 40% of the females and 34% of the males had some high school or less. 16% of the females and 21% of the males had graduated high school. 42% of the females and 41% of the males had some college or university education with approximately 3% of the females and 4% of the males

having graduated from some post-secondary institution. From the couple perspective, males had only slightly higher education than their female partners.

Discussion of Test Results

FACES III Test Results

The FACES III test results are provided in Tables 5 and 6. The number and percentage of couples who perceived their family functioning according to each of the 16 family types on the Circumplex model are presented in Table 5.

Number and percentage of couple's perception of family functioning, grouped as balanced, midrange, and extreme are provided in Table 6 (see also Appendix G). Olson et al. (1985) provide percentages of couples from a normal sample across the life cycle which vary considerably from those obtained in the present study. They found 44% of their sample to be balanced whereas 11% of the present sample were perceived as balanced. The present sample's representation of the midrange (28%) and extreme (61%) groupings are also different from Olson's 44.3% for the midrange and 11.7% for the extreme groupings. The obtained test results appear to be a true representation of what should be expected from a clinical sample. Olson's sample was drawn from a normal population and so differs considerably from the present one.

Table 5

Couple Perception of Family Functioning as Assessed by FACES-III(N=75/100%)

		Low ← ————— COHESION ————— → High			
		<u>DISENGAGED</u>	<u>SEPARATED</u>	<u>CONNECTED</u>	<u>ENMESHED</u>
High ↑ A D A P T A B I L I T Y ↓ Low	CHAOTIC	Chaotically Disengaged (6/8)	Chaotically Separated (12/16)	Chaotically Connected (5/7)	Chaotically Enmeshed (3/4)
	FLEXIBLE	Flexibly Disengaged (14/18)	Flexibly Separated (3/4)	Flexibly Connected (0/0)	Flexibly Enmeshed (0/0)
	STRUCTURED	Structurally Disengaged (20/26)	Structurally Separated (2/3)	Structurally Connected (2/3)	Structurally Enmeshed (0/0)
	RIGID	Rigidly Disengaged (9/12)	Rigidly Separated (0/0)	Rigidly Connected (0/0)	Rigidly Enmeshed (0/0)

Table 6

Couple Perception of Family Functioning: Percentage Respondents(n=75)

Type	Frequency	Percentage	
		Present Study	Olson's Study
BALANCED	8	11	44
MIDRANGE	21	28	44.3
EXTREME	46	61	11.7

PAIR Test Results

The results from the PAIR inventory are presented in Table 7. A comparison is also made with the results from the validity and reliability study conducted by Schaefer and Olson (1981). In their study, 192 non-clinical couples, who were considered to be a fairly representative population of married individuals who had experienced their relationship over an extended period of time, were administered the PAIR inventory. The present results are based on a sample of 75 clinical couples and most scores obtained are somewhat lower from those obtained by Schaefer and Olson (1981). The score on sexual intimacy (mean=54.99, sd=21.67) is higher in the present study than in the Schaefer and Olson study (mean=50; sd=17). The largest discrepancies, between this study and the Schaefer and Olson (1981) study, were on social intimacy (mean=45.18; sd=17.02) and intellectual intimacy (mean=43.85; sd=17.13).

Conflict Tactics Scale

Items k to r of the CTS were used in the present study to measure physical violence in the couple's relationship. In the final computation, 21.3% of the sample had no violence in their relationship with 78.7% having had some form of physical violence in the past year. Of this percentage, 52% were classified as a low

Table 7

Mean and Standard Deviations for Couples' Perceived Scores in Five Areas of Intimacy on the PAIR (N=75)

INTIMACY	PRESENT STUDY		SCHAEFER AND OLSON STUDY (1981)	
	MEAN	SD	MEAN	SD
EMOTIONAL	41.74	17.41	46	17
SOCIAL	45.18	17.02	61	16.9
SEXUAL	54.99	21.67	50	17
RECREATIONAL	52.89	17.19	58	18.8
INTELLECTUAL	43.85	17.13	58	15

violence group and 26.7% were classified as a high violence group.

Table 8 presents male and female reports of violence directed at their spouse and received from their spouse. The table is arranged so that comparisons can be made for each partner's report of violence by themselves with their partner's report on the same item. There is a high corresponding agreement on reports of violence by the male on items k to n between partners (see Appendix D). However, on the more severe items, male partners tended to report less. On the same items, for physical violence committed by the female, there is a very high rate of agreement between partners across all items. On item q, males gave higher reports (18%) of their partners "threatening with a knife or gun" than did the females (8%). Males also gave higher reports of their partners "using a knife or gun" (5%) than they did themselves (1%). Females, however, gave higher reports (4%) of their partners in the use of a gun or knife.

To determine the accuracy of reported frequencies of violent acts between males and females, a series of correlated t-tests were performed for each item on the Conflict Tactics Scale. A significant difference was found between reports on item m which was "slapped the other one" ($t=2.62$; $df=74$; $p<.05$). On this item females reported a higher frequency (mean=3.86) of their partners slapping them than the males reported (mean=2.01). On the remaining items (k,l,n,o,p,q,r), no significant difference in reporting frequency was obtained for violent acts performed by the

Table 8

Percentage of Partners Reporting Physical Violence in Their
Relationship on the CTS (n=75)

Item	Male Respondent on Himself	Female Respondent on Male	Female Respondent on Herself	Male Respondent on Female
k	24	32	37	37
l	70	62	58	57
m	42	39	43	41
n	34	37	34	42
o	25	33	30	32
p	17	36	11	11
q	5	8	12	18
r	1	4	4	5

male. For violent acts performed by the female, similar results were obtained. A significantly higher frequency of the item "threatened with a knife or gun" was reported by the females on themselves than was reported by the males on their partners ($t=2.77$; $df=74$; $p<.01$). No other difference between reported frequencies of violent acts by the female were found on the remaining items of the CTS. A comparison of frequency means, between the male's report of violence by himself and the woman's report of violence by herself, yielded a significant difference on the item "hit or tried to hit with something" (item 9). On this item, females reported a significantly higher frequency of engaging in this activity (mean=1.29) than the males reported on themselves (mean=0.98) ($t=2.55$; $df=74$; $p<.05$). Table 8 indicates that 25 males and 30 females reported on the occurrence of this act.

Table 9 presents means and standard deviations of violence received by each partner. These scores have been weighted for frequency and severity of the violence between the female's report of violence given (mean=16.32) and the male's report of violence received (mean=18.78). There is a larger discrepancy between the female's report of violence directed at her (mean=37.33) and the males report of violence given (mean=11.90). The mean estimated violence for the entire sample ($n=75$) is 47.09.

Comparison of Therapist's and Couple's Reports of Therapeutic

Outcome

The present research consisted of reports on therapeutic outcome by couples under study and their therapists. To test the

Table 9

Means and Standard Deviations of Violence Given and Received as
Measured by the CTS (n=48)

	MALE		FEMALE		COUPLE	
	Mean	S.D.	Mean	S.D.	Mean	S.D.
Violence Received	18.78	32.06	37.33	51.74	-	-
Violence Given	11.90	21.87	16.32	30.73	-	-
Estimated Total Violence	-	-	-	-	47.09	58.58

validity of therapists' reports of success in therapy, crosstabulations were calculated with couples' reports of success in therapy. These results are presented in Table 10. The total number of couples who participated in the follow-up data was 21. Of that number, 16 couples were reported to have successful outcome by both therapist and couple ratings. This represented 80% agreement between therapists and couples. Four couples (20%) reported unsuccessful therapy where therapists reported success and 1 couple (5.9%) reported therapy as successful but the therapist did not. Of the 21 who stayed in counselling, therapists gave an overall rating of 95.2% success rate compared to a 80% success rate by the couples. A comparison of therapeutic outcome by individuals indicated that a total of 22 males and 25 females completed outcome reports. This difference in numbers is attributed to a small number of individuals continuing in therapy after their partner had discontinued. The agreement ratio between therapists' and individuals' reports of outcome is somewhat lower than the combined couple scores. A success agreement ratio of 75% was obtained between the therapist and the female. An overall agreement ratio, on successful therapy, of 93.8% was obtained between the two partners. The obtained results indicate that, for the 21 couples who continued in therapy, there was a much higher report of success by both therapist and couple.

An overall examination of the data indicated that therapists' reported a 65.3% success rate and a 34.7% failure rate. This

Table 10

Comparison of Therapist and Couple Reports of Therapeutic Outcome(N=21)

Count Row Percents Column Percent		Couple Report	
		Not Successful	Successful
Therapist Report	Not Successful		1 100.0 5.9
	Successful	4 20.0 100.0	16 80.0 94.1

represented 49 couples who had successful therapy and 26 who had unsuccessful therapy. Of the number who did not continue in therapy, therapists reported 50% as successful and 50% as being unsuccessful. This analysis leads the researcher to be confident in interpreting the obtained reports, by therapists, to be a valid indicator of therapeutic outcome of couples in therapy.

Discussion of Research Questions

A major research question of this study considered whether there are characteristics of violent couples that are predictive of outcome in therapy. A discriminant analysis with two groups was compared to obtain a ranking of all couples in terms of their discriminant scores and to determine the optimum value which discriminated successful from non-successful couples. Means and standard deviations of all variables for both groups is presented in Table 11. Table 12 gives the standardized discriminant function coefficients used to classify all couples into the two groups. An examination of the results indicate that 'social intimacy' and 'intellectual intimacy' are strong indicators of group membership. 'Social intimacy' obtained an F score of 3.70 ($p < .05$) and 'intellectual intimacy' received an F score of 5.12 ($p < .05$). Table 13 presents the classification of all cases using the discriminant function analysis. The group centroid for the unsuccessful group is -0.507 and for the successful group, the group centroid is 0.269. Results indicate that 20 unsuccessful couples (76.9%) were classified correctly and 6 unsuccessful

Table 11

Means and Standard Deviations of all Variables used in the
Discriminant Function Analysis

Couple Variable Name	Unsuccessful		Successful	
	Mean	SD	Mean	SD
Distance from Center	11.27	5.00	11.27	5.58
Cohesion	29.33	6.93	31.98	8.55
Adaptability	25.56	5.72	26.29	5.31
Emotional Intimacy	36.31	13.88	44.30	18.57
Social Intimacy	39.13	13.95	48.78	17.62
Sexual Intimacy	52.44	19.02	56.04	23.16
Intellectual Intimacy	37.73	11.29	46.93	18.99
Recreational Intimacy	47.63	14.63	55.73	18.08
Relationship Satisfaction	48.08	25.81	43.55	24.40
Physical Violence	45.02	57.87	33.39	43.79

Table 12

Standard Canonical Discriminant Function Coefficient for all
Variables Predicting to Successful and Unsuccessful Therapy

Variable Name	Function
Distance from Center	0.113
Cohesion	-0.109
Adaptability	-0.327
Emotional Intimacy	0.101
Social Intimacy	0.499
Sexual Intimacy	-0.173
Intellectual Intimacy	0.604
Recreational Intimacy	0.593
Relationship Satisfaction	0.335
Physical Violence	-0.054

Table 13

Classification of Cases Using Discriminant Function Analysis With
Two Groups

Actual Cases	Predicted Cases		Total
	Not Successful	Successful	
Not Successful	20 (76.9%)	6 (23.1%)	26
Successful	19 (38.8%)	30 (61.2%)	49

Percent of "Grouped" cases correctly classified: 66.67%

couples (23.1%) were classified incorrectly. Of the 49 successful couples, 30 (61.2%) were classified correctly and 19 (38.8%) incorrectly. Using discriminant analysis the total percentage of couples classified correctly was 66.67%.

Because of the unequal size of the two groups, the largest percentage of correct classifications based on chance was calculated in accordance with the formula n/N , where n is the size of the largest group and N is the total sample size. The result was 49/75, or 65%. It appears that the obtained result of 61.2% classification into the successful group is less than chance accuracy. For the unsuccessful couples the 76.9% presents a more reliable classification. The percent of all grouped cases correctly classified (66.67%) also represents a hit ratio not much higher than chance accuracy.

Research question two stated that violent couples would experience less therapeutic success than non-violent couples. The present analysis did not find evidence to support this question. Bi-variate analysis of violence with the couple's report of therapeutic success did not reveal any significant relationship between these two variables (Table 14). A total of 22 couples continued in therapy. 81% of these couples reported that therapy had been successful for them. In the no-violence group ($N=4$), all couples reported success whereas in the low-violence group ($N=12$), 83.3% reported success and 16.7% reported therapy as unsuccessful. In the high violent group ($N=5$), 3 couples or 60% reported success

Table 14

Couple Reports of Successful and Unsuccessful Therapy for Three
Levels of Violence as Measured by the CTS (N=22)

Count Row Percents Column Percent		Therapeutic Outcome Successful Not Successful	
V I O L E N C E	None	4	
		100.0 23.5	
	Low	10	2
		83.3 58.8	16.7 50.0
	High	3	2
		60.0 17.6	40.0 50.0

and 2 couples, or 40% reported no success. Considering the fact that all these couples continued in therapy, a high percentage of reported success is not unlikely. The numbers in the three groups are quite small which makes any conclusions difficult. However, the trend seems to indicate that the no-violence couples and low-violence couples have a higher chance of success in therapy if they continue than the high violence couples.

Table 15 presents the overall results obtained from therapists' reports of therapeutic outcome for the three groups (a previous analysis and discussion established the validity of therapists' reports of outcome in therapy). Therapists reported a 65.3% positive therapeutic outcome rate for couples in all three groups. Therapist's ratings included all couples in the sample (n=75). Crosstabulation of therapist report of successful therapy and violence in the relationship did not reveal any significant relationship. With the no-violence group and low-violence group, a higher percentage of couples (approximately 69% for each) were reported as having successful therapy as compared to the approximately 31% who did not. 26.7% of the couples in this sample were reported to have a high level of violence in their relationship. Of that number, the success rate, as reported by both therapists and couples appear to be relatively equal. A histogram, constructed to see the distribution of violence amongst couples, is presented in Figure 1. Results of this distribution revealed that a large proportion of couples (79%) had violence in

Table 15

Therapist Reports of Successful and Unsuccessful Therapy for Three
Levels of Violence as Measured by the CTS (N=75)

Count Row Percents Column Percent		Therapeutic Outcome Successful Not Successful	
V I O L E N C E	None	11	5
		68.8	31.3
		22.4	19.2
	Low	27	12
		69.2	30.8
		55.1	46.2
	High	11	9
		55.0	45
		22.4	34.6

their relationship. The mean violence score was 47.09 ($sd=58.58$) indicating a skew towards the upper levels of relationship violence. A discriminant function analysis with these groups was compared to obtain a ranking of all couples in terms of the optimum which discriminated no-violence couples, low-violence couples, and high violence couples. The standardized discriminant function coefficients used to classify all couples into the three groups is presented in Table 16. A calculation of the largest percentage of correct classifications based on chance resulted in a score of 53.0%. None of the scores obtained from the analysis are much larger than that expected by chance (see Table 17). Three variables, 'cohesion', 'adaptability' and 'social intimacy' were found to make significant contributions to the prediction of no-violence, low-violence, or high-violence membership. Cohesion obtained a Wilk's lambda of 0.904 ($F=3.86$; $p<.05$); adaptability obtained a Wilk's lambda of 0.873 ($F=5.29$; $p<.01$); and social intimacy resulted in a Wilk's lambda of 0.791 ($F=9.61$; $p<.01$). An examination of these variables revealed that the no-violence group was less disengaged and more towards the balanced region on the cohesion dimension than the low-violence and high-violence groups. On the adaptability dimension, the high-violence group was more rigid whereas the low-violence and no-violence group tended to be more midrange and flexible. On the social intimacy scores, the high-violence group reported lower social intimacy than either of the other two groups.

Figure 1. Frequency histogram of reported physical violence on CTS
($n=60$, means=47.09, median=21.00; S.D.=58.58)

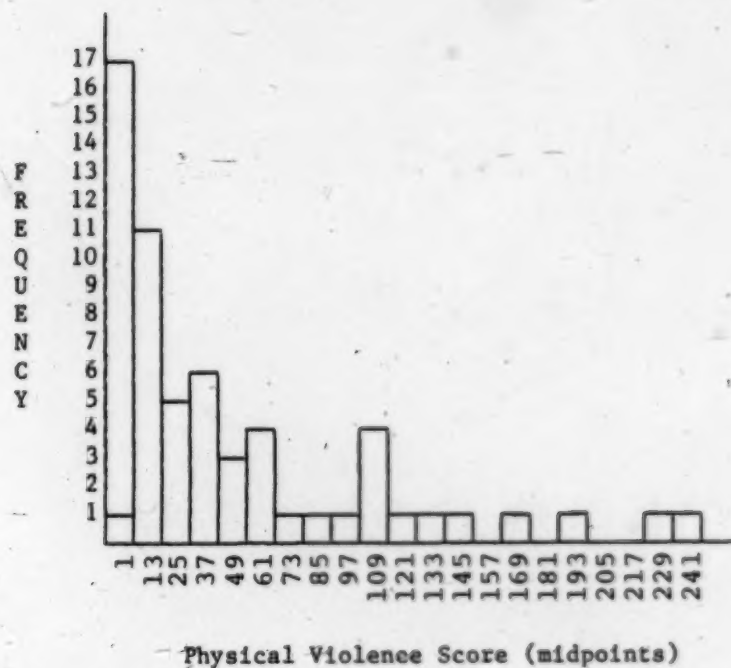


Table 16

Standardized Canonical Discriminant Function Coefficients for all
Variables Predicting to No-Violence, Low-Violence, and
High-Violence

Variable Name	Function 1	Function 2
Social Intimacy	0.830	0.171
Adaptability	0.598	-0.389
Cohesion	0.521	-0.217
Intellectual Intimacy	0.447	-0.213
Couple Satisfaction	-0.444	0.378
Emotional Satisfaction	0.294	0.027
Sexual Intimacy	-0.015	-0.001
Recreational Intimacy	0.354	-0.443
Distance from Center	-0.222	0.251

Table 17

Classification of Cases Using Discriminant Function Analysis With
Three Groups

Actual Group	Total Cases	Predicted Group Membership		
		None	Low	High
None	16	11(68.8%)	3(18.8%)	2(12.5%)
Low	40	10(25.0%)	18(45.0%)	12(30.0%)
High	20	3(15.0%)	6(30.0%)	11(55.0%)

Percent of "Grouped" cases correctly classified: 52.63%

Research question three predicted that violent couples would be classified as being rigidly enmeshed on the Circumplex Model as measured by FACES III. Results provided partial support for this research question. An analysis of variance indicated a significant difference ($p < .01$) between the means of the non-violent group (mean=29.09; sd=5.12; se=1.28) (Table 18) and the high-violent group (mean=23.50; sd=5.35; se=1.18) on the adaptability dimension (Table 19). No significant difference was found between the low-violent group (mean=26.19; sd=5.03; se=0.80) and the non-violent group nor between the low-violent group and the high-violent group on adaptability. High-violent couples were more rigid on the Adaptability dimension than were couples in the other two groups. On the dimension of Cohesion, the opposite from what was predicted occurred. On the Cohesion dimension, a significant difference was found between the non-violent group (mean=35.22; sd=7.33; se=1.83) and the high-violent group (mean=28.00; sd=8.39; se=1.88; $p < .05$) indicating that violent couples were significantly more disengaged than enmeshed (Table 20). No difference was found between the low-violent group (mean=31.03; sd=7.56; se=1.20) and the non-violent group and between the low-violent group and the high-violent group on Cohesion.

In this study, a very high percentage (71.7%) of violent couples as compared to non-violent couples (10%) fell at the disengaged end of the cohesion dimension as measured by FACES III. Only 1.7% of violent couples and 3.3% on non-violent couples

Table 18

Means, Standard Deviations and Standard Errors for Cohesion and
Adaptability for Three Levels of Relationship Violence as assessed
by the CTS (N=75)

Variable	Violence Level	Means	sd	se
Cohesion	None	35.22	7.33	1.83
	Low	31.03	7.56	1.20
	High	28.00	8.39	1.88
Adaptability	None	29.09	5.12	1.28
	Low	26.19	5.03	0.80
	High	23.50	5.35	1.88

Table 19

Analysis of Variance for Effects of Adaptability on Couple Violence
(N=75)

Source of Variation	DF	Sum of Squares	Mean Squares	F Ratio	F Prob
Between groups	2	278.90	139.45	5.29	<.01
Within groups	73	1924.45	26.36		
Total	75	2203.35			

Table 20

Analysis of Variance for Effects of Cohesion on Couple Violence
(N=75)

Source of Variation	DF	Sum of Squares	Mean Squares	F Ratio	F Prob
Between groups	2	463.84	231.92	3.87	<.05
Within groups	73	4375.96	59.94		
Total	75	4839.80			

were classified as enmeshed. When the distribution was examined for Cohesion and Adaptability separately (Table 21), results indicate that the majority of violent couples are disengaged ($n=43$) rather than enmeshed ($n=1$) but are more evenly distributed across the adaptability dimension. Table 22 also indicates that a large number of violent couples fall into the chaotic classification ($n=15$) as compared to the rigid classification ($n=8$). Though not significant, an examination of means did indicate that most of the high-violent couples are in the rigid classification whereas more low-violent couples are in the chaotic classification.

Dropout Data

Not all couples who began therapy continued in therapy. As a result of this, not all couples were available to complete the follow-up questionnaires. To get an understanding of those couples who prematurely ended therapy, an attempt was made to see if there were variables which contributed to the likelihood of couples continuing or prematurely ending therapy. Couples who prematurely ended therapy were those who cancelled appointments; did not show for sessions; and who ended counselling before the therapist could engage them. The mean number of sessions for those who prematurely ended therapy was 2.05 ($sd=1.22$). Those that prematurely ended therapy have to be distinguished from couples who continued in therapy but ended before follow-up data was collected two months later. In the latter case, it was determined by both therapist and couple that therapy was completed, and therefore, these couples

Table 21

Distribution of Couples by Level of Violence and Level of Cohesion
as Assessed by the CTS and FACES III (n=75)

		Low ← COHESION → HIGH DISENGAGED SEPARATED CONNECTED ENMESHED			
V I O L E N C E	NONE	6	5	3	2
	LOW	29	5	4	1
	HIGH	14	6	0	0

Table 22

Distribution of Couples by Level of Violence and Level of Adaptability
as Assessed by the CTS and FACES III (N=75)

		Low ← ————— ADAPTABILITY ————— → HIGH RIGID STRUCTURED FLEXIBLE CHAOTIC			
V I O L E N C E	NONE	1	3	1	11
	LOW	3	15	8	13
	HIGH	5	5	8	2

were not considered in this study as having prematurely stopped therapy.

An assumption was made by this author that a greater number of couples who had violence in their relationship would be more likely than non-violent couples to drop out of counselling prematurely. However, no significant difference was found between these groups. Results indicate that in the non-violent group, 50% of the couples remained in therapy and 50% ended prematurely. Results for the low violence group were similar, with 46.2% remaining and 53.8% dropping out. In the high violence group, 55% remained in counselling and 45% ended prematurely. Overall results indicate that 49.3% of all couples continued in therapy and 50.7% ended prematurely.

The distribution of couples who remained in therapy and those who dropped out from therapy by therapist is presented in Table 23. No significant relationship was found with regards to prematurely ending therapy. Couples who continued in therapy and those that dropped out were distributed fairly evenly between therapists. Results did indicate considerable variability in the distribution of couples to therapists. This variability is partially explained by the fact that some therapists left the agency during the research period and other therapists were only working on a part-time basis. Of those that saw 6 or more couples, differences arise in terms of those that continued and those that dropped out of therapy. For example, therapist #1 saw a total of 9

Table 23

Distribution of Violent and Non-Violent Couples, as Measured by the CTS,
Who Continued or Prematurely Ended Therapy, by Therapist (N=75)

VIOLENCE		THERAPIST												Total
		1	2	3	4	5	6	7	8	9	10	11	12	
NONE	Continued	3	0	2	0	0	0	0	1	1	1	0	0	8
	Dropped Out	0	1	0	1	1	1	0	0	4	0	0	0	8
LOW	Continued	4	3	2	0	1	3	0	1	3	0	4	0	21
	Dropped Out	1	2	5	0	1	1	0	1	5	0	2	0	18
HIGH	Continued	1	2	2	0	2	0	0	0	1	1	0	0	9
	Dropped Out	0	0	3	0	1	1	1	0	2	0	2	1	11
Total Continued		8	5	6	0	3	3	0	2	5	2	4	0	38
Total Dropped out		1	3	8	1	3	3	1	1	11	0	4	1	37
TOTAL		9	8	14	1	6	6	1	3	16	2	8	1	75

couples, 8 of which continued and one who discontinued. Whereas, for therapist #9, who saw 16 couples, only 5 continued and 11 discontinued. The proportion of continuers and discontinuers for the remaining therapists are relatively equal. On the basis of level of violence, there is some variability in terms of couples who discontinued or continued across therapists. In the low-violence group, for example, therapist #1 was able to engage 4 out of 5 couples whereas therapist #9 was able to engage only 3 out of 8 couples. The small numbers make any substantial conclusions impossible. However, the trends suggest that there may be characteristics of therapists, whether of personality or of theoretical orientation, which influence whether they are successful or not in engaging clients with varying levels of violence in their relationship.

Summary

This chapter presented a detailed analysis of the obtained results. The major research question examined characteristics of violent couples that were thought to be predictive of outcome in therapy. A discriminant function analysis failed to confirm this assumption. Partial support was obtained for secondary research questions in the study. Implications and further expounding of these results are explored in the following chapter.

CHAPTER VI

CONCLUSIONS AND IMPLICATIONS

This chapter presents a summary of theoretical conclusions and implications of the present study which follows from the results presented in the previous chapter. Limitations of the study are presented and suggestions for future research are delineated.

Theoretical Implications

The major purpose of this research was to determine whether there were characteristics of couples in violent relationships that were predictive of outcome in therapy. The data collection procedure involved "insiders'" views of their relationship as assessed by the couple on self-report questionnaires as well as reports by the therapist as part of the therapeutic system. The integration of individual data from both partners provided the researcher with couple data and so the unit of analysis became the relationship itself. This has enabled conclusions to be drawn at the level of the relationship which otherwise were unavailable using aggregate male and female data. In the present study, the detailed analysis of violent couples was presented using the Circumplex Model of Family Functioning as the major theoretical framework.

The present study did not confirm that there are characteristics of violent couples that would be predictive of

therapeutic outcome. This poses some important questions. The Circumplex Model, using the FACES III instrument was able to categorize all groups on the basis of their distance from the centre of the model. Consistent with the Circumplex Model, a very large percentage of the non-violent groups scored in the mid-range and extreme categories indicating highly dysfunctional systems. However, because this was a clinical sample, a large enough difference was not found between the groups to make this variable either an adequate discriminator or an adequate predictor. When the 'distance from centre' was used just for the violent group, it again did not contribute significantly to predicting therapeutic outcome. It may be that this sample was not large enough nor provided a great enough range for 'distance from centre' to contribute in a meaningful way to therapeutic outcome. Olson et al. (1983) hypothesize that if the normative expectations of a couple or family support behaviors on one or both extremes of the Circumplex dimensions, it will function well as long as all family members accept these expectations. It may be the case that any therapeutically positive movement in counselling, no matter how slight, may contribute to more normative behaviors for violent couples. They may, according to the Circumplex Model, still be 'extreme' but now, in their view, more functional.

Adaptability, the ability of a marital or family system to change its power structure, role relationships, and relationship rules in response to situational and developmental stress,

contributed very little to the prediction of therapeutic outcome. Both the high violent and low violent groups scored lower than the non-violent group on adaptability, indicating that they were more rigid than the non-violent couples. But, because there was little difference between the means of the three groups, this variable again failed to contribute significantly to the overall variance of the dependent variable. It is proposed here, that if the sample were larger and the couples more evenly distributed along the dimension, it may prove to be a significant factor. The question naturally arises: Will couples who are rigid on the Circumplex Model experience less therapeutic success than couples who are more chaotic? And similarly, will couples who are flexible or structured, experience greater therapeutic success than rigid or chaotic couples? This present study was unable to ascertain whether this would be the case or not.

The dimension of cohesion, which Olson et al. (1983) define as the emotional bonding that family members have toward one another, shows positive signs of being an important predictor variable for successful therapeutic outcome. A larger sample of non-violent and severe-violent couples would probably yield important clinical information about this dimension and its role in setting therapeutic goals for couples.

Weitzman and Dreen (1982) suggest that the "violence prone" system of the couple is marked by rigid relationship rules and rigid behavior. In addition, a high degree of enmeshment is also

characteristic of these couples. The present study found evidence for the rigidity of the violent couple's system which suggests that a more thorough understanding of the importance of this dimension should probably be the topic of further research. On the dimension of cohesion, the present study discovered a trend opposite to that suggested by Weitzman and Dreen (1982). High-violent couples were significantly more disengaged in their relationship than were non-violent couples. In the present study, no difference was found between these two groups and the low-violent group which suggests to this author that in this clinical sample, the low-violent group functioned at a level similar to the non-violent group and that this variable would probably only be differentiated when compared to a non-clinical, non-violent sample. Because violent couples in the present study were more towards the disengaged end of the cohesion continuum, this author suggests that caution should be exercised in the clinical treatment of this group. If the assumption is maintained that violent couples are enmeshed, a therapeutic goal would be to help the members of that system disengage or individuate. Coleman (1980) states that "as intense marital symbiosis is a major factor in the eruption of violence, the major thrust of the therapeutic endeavour is differentiation of the spouses" (p. 212). The results of the present study suggest that therapists should be careful to assess the degree of cohesion in a violent-prone system rather than assume that a therapeutic goal is to disengage an enmeshed system. If further research,

especially of an interactive nature, confirms the present findings, it is suggested that trying to disengage an already disengaged system will hinder therapeutic goals rather than create a more viable and balanced system.

Significance of Intimacy Scales

Social intimacy and intellectual intimacy proved to be strong indicators of therapeutic outcome as assessed by therapists. In addition social intimacy was very low for couples in the high-violent group. The intent of the intimacy scales is to assess each partner's needs and the degree to which they are being met (Schaefer & Olson, 1981). Social intimacy, as defined by the PAIR, is the experience of having common friends and a similar social network whereas intellectual intimacy is the experience of sharing ideas, talking about events in one's life, or discussing job related issues, current affairs, etc. Results in the present study suggest that, for most couples, social and intellectual needs are not being met. It seems that the more socially isolated individuals in a relationship are, the greater the likelihood of being unsuccessful in therapy. This would suggest that possible therapeutic interventions would be aimed at helping couples increase the amount of time they would share socially together. An increase in the amount and quality of shared intellectual pursuits is also indicated. For violent couples, lack of social intimacy is also a significant factor in their relationship. This appears to be consistent with findings that violent couples are socially

isolated and suggests that a therapeutic goal for violent couples would be to guide them into creating and maintaining common social contacts. The lack of social intimacy is also consistent with the present study's findings that high-violent couples are more disengaged than enmeshed. This would suggest that partners in the relationship have little or nothing to do with each other's social contacts. Successful therapeutic interventions would probably be increased if therapists were aware of this need in the violent couple's relationship and the possible impact which that lack of social intimacy has in successful therapy.

Limitations and Delimitations of the Study

This study was restricted to couples at Family Service Association of Edmonton. This limits the generalizability of the results but confirms the notion that this type of research is possible on a relatively large scale.

The nature of the present sample was a factor which was limiting and which probably affected the overall results of the study. Being a clinical sample, it may have been difficult to differentiate couples on the variable of violence alone. Not all couples in the sample had physical violence as a presenting problem despite having physical violence in their relationship. It may be the case that, in a clinical sample, very little difference exists between non-violent and low-violent couples in terms of why they enter therapy. .

The nature of the setting from which the sample was drawn has its limitations in terms of not being able to provide a sample which was more representative of severe relationship violence. The majority of the more severe violent cases end up with the man going to the Forensic Assessment Centre and the woman being assisted by a sheltered safe place. To get a clearer picture of relationship violence, this sample should be included but economical, practical, and ethical considerations greatly reduce this possibility.

The fact that couples were self-selected to therapy increases the likelihood of them wanting their relationship to be different. Violent couples who come for therapy are probably highly motivated to end the violence, remain in therapy, and produce positive change. The present study certainly suggests that violent couples were as likely as non-violent couples to remain in therapy.

The FACES III test, though a very useful instrument, has certain limitations. A violent system is a very complex system and FACES III test items are too limited to adequately assess the complex intricacies of cohesion and adaptability in this group.

The present study did not take into account the influencing effect of the couples' different life stages of development which has been shown in a major study by Olson et al. (1983) to have varying effects. Since this study was restricted to a limited clinical setting and a limited number of subjects, the resultant findings will have limited generalizability.

Suggestions for Further Research

Since this study has sampled only 75 couples from one urban center, Edmonton, Alberta, future research could include a larger number of couples to increase generalizability. This could be done by including other centers in Edmonton where couples receive counselling as well as comparing results with couples in rural settings and other urban settings.

Results from this study suggest that important contributions could be gained from an interactional study of violent couples. An important component of future interactional studies should focus on the role of adaptability, cohesion, and intimacy in the couple's relationship. The nature of future interactional studies could be guided by questions such as (1) To what extent have violent couples been able to devise and agree upon rules for sharing, exchange, and distributive justice in the family? (2) What types of communication-relational patterns exist between violent couples (complementary, symmetrical, parallel)? (3) To what extent are violent couples appropriately intimate with each other (physically, emotionally, socially, intellectually)? and (4) To what extent are violent couples capable of being intimate? Interactional studies, at the level of the dyad, would be an important step towards an understanding of how violent couples relate to one another. Because of the nature of this type of study, only a small number of participants would be involved. It would, therefore, be most important to get representative couples who have high levels of

violence, low levels of violence, and no violence in their relationship. In addition, a comparison with a non-clinical no-violence sample would be most enlightening.

A longitudinal study of violent couples who go through therapy would be of interest. This type of study would be of importance in terms of recidivism of violence but more importantly should focus on increased communication and structural changes in the couple's relationship over time.

Phenomenological studies aimed at the level of the relationship would also be of interest. Themes of a systemic nature could be ascertained from a study of this nature.

Conclusion

The present study has been a beginning step in the process of understanding violence at the relationship level. Much work remains to be done especially in the area of theory building to explain the ongoing interactions which serve to maintain violence within the system. In addition, more elaborately fine-tuned analysis of these interactions should be undertaken to more fully understand the complexities of the violent relationship system.

In addition to looking at factors which may have accounted for the lack of significant findings, the present author does not discount the fact that the Circumplex Model may not be an appropriate model for the study of family violence. The complexities which a violent prone system bring to counselling may be too great to be reduced to the dimensions of adaptability and

cohesion. As the present findings attest, these dimensions are important and there is a need to understand the implications and significance of these variables in terms of how violent couples interact. However, the results of the present study suggest that what may be needed in the study of domestic violence with couples, is to develop a theory of how these couples interact with each other and identify the processes which maintain and escalate the violence in the relationship. The present author suggests that a systems framework is workable with violent couples but rather than trying to understand the dynamics of this system by attempting a fit between what happens in the couple's relationship and a circumplex model, it may be more worthwhile to begin to empirically look at this population by utilizing systems concepts and building a theory from the ground up.

Results from the present study also suggest several implications from a therapeutic standpoint:

1. Therapists should inquire during the intake process whether there has been physical violence within the last year.
2. Therapists should be careful to assess the degree of cohesion in the relationship rather than to assume an enmeshed system.
3. Increasing the amount of shared social activities, may increase the chances of successful therapy for violent couples.
4. Once committed to the counselling process, there can be a high rate of success for couples who have physical violence in their relationship.

On a personal note, I believe that the present study is a step in the right direction in terms of trying to discover the nature of violent systems, from the level of the relationship. However, it is only a small step. Past research has failed to look at the fact that a minimum of two people are involved in a violent relationship. Research based on aggregate or individual data misses the complexities of the relationship itself. It is hoped that results of this present study will be taken as a starting point so that more finely tuned interactional studies of violent couples can be undertaken.

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APPENDICES

APPENDIX A
RESEARCH PARTICIPATION AGREEMENT

RESEARCH PARTICIPATION AGREEMENT

I agree to participate in a study designed to look at various aspects of my relationship with my spouse/partner. The project involves spending approximately one hour before therapy to answer questions on a questionnaire.

I understand that my participation is voluntary and that my treatment or status will not be affected in any way, whether I choose to participate or not. No information regarding my responses will be communicated to staff. I also understand that certain data (age, income, referral source, etc.) may be collected from me or my file. I understand that when the study is published, my data will not be traceable to me.

I understand that the researcher, Ron Lehr, will take every reasonable precaution to ensure my confidentiality.

Witness

Subject

Date

Date

University of Alberta
Faculty of Education, Department of Educational Psychology
Family Service Association of Edmonton
Edmonton, Alberta

APPENDIX B

FACES III

FACES III: Couple Version

David H. Olson, Joyce Portner, and Yoav Lavee

1	2	3	4	5
Almost Never	Once In Awhile	Sometimes	Frequently	Almost Always

DESCRIBE YOUR FAMILY NOW:

- _____ 1. We ask each other for help.
- _____ 2. When problems arise, we compromise.
- _____ 3. We approve of each other's friends.
- _____ 4. We are flexible in how we handle our differences.
- _____ 5. We like to do things with each other.
- _____ 6. Different persons act as leaders in our marriage.
- _____ 7. We feel closer to each other than to people outside our family.
- _____ 8. We change our way of handling tasks.
- _____ 9. We like to spend free time with each other.
- _____ 10. We try new ways of dealing with problems.
- _____ 11. We feel very close to each other.
- _____ 12. We jointly make the decisions in our marriage.
- _____ 13. We share hobbies and interests together.
- _____ 14. Rules change in our marriage.
- _____ 15. We can easily think of things to do together as a couple.
- _____ 16. We shift household responsibilities from person to person.
- _____ 17. We consult each other on our decisions.
- _____ 18. It is hard to identify who the leader is in our marriage.
- _____ 19. Togetherness is a top priority.
- _____ 20. It is hard to tell who does which household chores.

FACES III: Couple Version

David H. Olson, Joyce Portner, and Yoav Lavee

1	2	3	4	5
Almost Never	Once In Awhile	Sometimes	Frequently	Almost Always

IDEALLY, how would you like YOUR FAMILY TO BE:

- _____ 21. We would ask each other for help.
- _____ 22. When problems arise, I wish we could compromise.
- _____ 23. We would approve of each other's friends.
- _____ 24. We would be flexible in how we handle our differences.
- _____ 25. We would like to do things with each other.
- _____ 26. Different persons would act as leaders in our marriage.
- _____ 27. We would feel closer to each other than to people outside our family.
- _____ 28. We would change our way of handling tasks.
- _____ 29. We would like to spend free time with each other.
- _____ 30. We would try new ways of dealing with problems.
- _____ 31. We would feel very close to each other.
- _____ 32. We would jointly make the decisions in our marriage.
- _____ 33. We would share hobbies and interests together.
- _____ 34. Rules would change in our marriage.
- _____ 35. We could easily think of things to do together as a couple.
- _____ 36. We would shift household responsibilities from person to person.
- _____ 37. We would consult each other on our decisions.
- _____ 38. We would know who the leader in our marriage is.
- _____ 39. Togetherness would be top priority.
- _____ 40. We could tell who does which household chores.

APPENDIX C

PERCEIVED INTIMACY IN RELATIONSHIPS SCALE (PAIR)

PAIR

0	1	2	3	4
Strongly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Strongly Agree
1.	My partner listens to me when I need someone to talk to.			
2.	We enjoy spending time with other couples.			
3.	I am satisfied with our sex life.			
4.	My partner helps me clarify my thoughts.			
5.	We enjoy the same recreational activities.			
6.	My partner has all of the qualities I've always wanted in a mate.			
7.	I can state my feelings without him/her getting defensive.			
8.	We usually "keep to ourselves."			
9.	I feel our sexual activity is just routine.			
10.	When it comes to having a serious discussion, it seems we have little in common.			
11.	I share a few of my partner's interests.			
12.	There are times when I do not feel a great deal of love and affection for my partner.			
13.	I often feel distant from my partner.			
14.	We have a few friends in common.			
15.	I am able to tell my partner when I want sexual intercourse.			
16.	I feel "put-down" in a serious conversation with my partner.			
17.	We like playing together.			
18.	Every new thing I have learned about my partner has pleased me.			
19.	My partner can really understand my hurts and joys.			
20.	Having time together with friends is an important part of our shared activities.			

PAIR

0	1	2	3	4
Strongly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Strongly Agree

21. I "hold back" my sexual interest because my partner makes me feel uncomfortable.
22. I feel it is useless to discuss some things with my partner.
23. We enjoy the out-of-doors together.
24. My partner and I understand each other completely.
25. I feel neglected at times by my partner.
26. Many of my partner's closest friends are also my closest friends.
27. Sexual depression is an essential part of our relationship.
28. My partner frequently tries to change my ideas.
29. We seldom find time to do fun things together.
30. I don't think anyone could possibly be happier than my partner and I when we are with one another.
31. I sometimes feel lonely when we're together.
32. My partner disapproves of some of my friends.
33. My partner seems disinterested in sex.
34. We have an endless number of things to talk about.
35. I feel we share some of the same interests.
36. I have some needs that are not being met by my relationship.

APPENDIX D
CONFLICT TACTICS SCALE

No matter how well a couple gets along, there are times when they disagree on major decisions, get annoyed about something the other person does, or just have spats or fights because they're in a bad mood or tired or for some other reason. They also use many different ways of trying to settle their differences. Below is a list of some things that you or your spouse/partner might have done when you had a fight and we would like you to circle for each one, how often you did it in the past year.

	Respondant - in the past year									Spouse/Partner - in the past year									Ever Happened		
	Never	Once	Twice	3-5 Times	6-10 Times	11-20 Times	More Than 20 Times	Don't Know		Never	Once	Twice	3-5 Times	6-10 Times	11-20 Times	More than 20 Times	Don't Know		Yes	No	Don't Know
a. Discussed the issue calmly.	0	1	2	3	4	5	6	x		0	1	2	3	4	5	6	x		1	2	x
b. Got information to back up (his/her) side of things.	0	1	2	3	4	5	6	x		0	1	2	3	4	5	6	x		1	2	x
c. Brought in or tried to bring in someone to help settle things.	0	1	2	3	4	5	6	x		0	1	2	3	4	5	6	x		1	2	x
d. Insulted or swore at the other one.	0	1	2	3	4	5	6	x		0	1	2	3	4	5	6	x		1	2	x
e. Sulked and/or refused to talk about it.	0	1	2	3	4	5	6	x		0	1	2	3	4	5	6	x		1	2	x
f. Stomped out of the room or house (or yard).	0	1	2	3	4	5	6	x		0	1	2	3	4	5	6	x		1	2	x
g. Cried.	0	1	2	3	4	5	6	x		0	1	2	3	4	5	6	x		1	2	x
h. Did or said something to spite the other one.	0	1	2	3	4	5	6	x		0	1	2	3	4	5	6	x		1	2	x
i. Threatened to hit or throw something at the other one.	0	1	2	3	4	5	6	x		0	1	2	3	4	5	6	x		1	2	x

	Respondant - in the past year									Spouse/Partner - in the past year									Ever Happened		
	Never	Once	Twice	3-5 Times	6-10 Times	11-20 Times	More Than 20 Times	Don't Know		Never	Once	Twice	3-5 Times	6-10 Times	11-20 Times	More than 20 Times	Don't Know	Yes	No	Don't Know	
j. Threw or smashed or hit or kicked something.	0	1	2	3	4	5	6	x		0	1	2	3	4	5	6	x	1	2	x	
k. Threw something at the other one.	0	1	2	3	4	5	6	x		0	1	2	3	4	5	6	x	1	2	x	
l. Pushed, grabbed, or shoved the other one.	0	1	2	3	4	5	6	x		0	1	2	3	4	5	6	x	1	2	x	
m. Slapped the other person.	0	1	2	3	4	5	6	x		0	1	2	3	4	5	6	x	1	2	x	
n. Kicked, bit or hit with a fist.	0	1	2	3	4	5	6	x		0	1	2	3	4	5	6	x	1	2	x	
o. Hit or tried to hit with something.	0	1	2	3	4	5	6	x		0	1	2	3	4	5	6	x	1	2	x	
p. Beat up the other one.	0	1	2	3	4	5	6	x		0	1	2	3	4	5	6	x	1	2	x	
q. Threatened with a knife or gun.	0	1	2	3	4	5	6	x		0	1	2	3	4	5	6	x	1	2	x	
r. Used a knife or gun.	0	1	2	3	4	5	6	x		0	1	2	3	4	5	6	x	1	2	x	
s. Other: _____	0	1	2	3	4	5	6	x		0	1	2	3	4	5	6	x	1	2	x	

And what about your (spouse/partner)? How often he/she (item) in the past year.

FOR EACH ITEM CIRCLED EITHER "Never" OR "Don't Know"

Did you or your (spouse/partner) ever (item)?

PLEASE RETURN THESE FORMS TO THE RECEPTIONIST. Thank you

APPENDIX E
COUPLE INFORMATION REQUEST FORMS

File number _____
Therapist _____

COUPLE INFORMATION REQUEST

Please fill out the following information:

Date: _____

Name (male) _____ Age _____

Name (female) _____ Age _____

Husband	Wife	Education Level:
_____	_____	Grade IX or less
_____	_____	Some High School
_____	_____	Graduated from High School
_____	_____	Some college, technical school or university
_____	_____	Graduate school

Occupation:

Is husband employed? Yes _____ No _____
_____ part time _____ full time

If yes, what is his job?

Is wife employed? Yes _____ No _____
_____ part time _____ full time

If yes, what is her job?

Marital Status:

_____	_____	First marriage
_____	_____	Second or more marriages
_____	_____	Common law relationship
_____	_____	Second or more common law relationship

How long have you been living together?
_____ years _____ months

Age and Sex of Children:

Age	Sex
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

(continued)

Page 2
Couple Information Request

Husband	Wife	<u>Religious Preference</u>
---------	------	-----------------------------

_____	_____	Protestant
_____	_____	Roman Catholic
_____	_____	Jewish
_____	_____	none
_____	_____	other (specify) _____

How often do you attend church services?

_____	_____	Never or almost never
_____	_____	On religious holidays only (eg. Christmas, Easter)
_____	_____	Once per month
_____	_____	On a weekly basis

Husband	Wife	<u>Ethnic Background</u>
---------	------	--------------------------

_____	_____	Anglo-Saxon
_____	_____	German
_____	_____	Ukranian
_____	_____	Other (specify) _____

Counselling Background

Have you, as a couple, ever had counselling before?

_____ Yes _____ No

If yes: _____

- How long were you, in counselling? _____
- On the average, how many times a month did you meet your counsellor?
_____ sessions per month
- Did you consider this counselling to be successful?
_____ Yes _____ No
- If yes, how was it successful. If no, how was it not successful?

APPENDIX F
FOLLOW-UP QUESTIONNAIRES

Couple name: _____
 File number: _____
 Therapist: _____
 Date: _____

THERAPIST FORM

1. How many sessions have you had with this couple? _____
 Is this couple still in counselling? _____ Yes _____ No.
 If no, reason for termination: _____

2. Has physical violence been identified in this couple's relationship?
 _____ Yes _____ No.
 If yes, rate how frequently physical violence has been used by this couple in the past year.

1	2	3	4	5
Once	Twice	3-5 times	6-10 times	11-20 times

3. Please rate what you believe will be the outcome of therapy for this couple.

1	2	3	4	5
Significant Deterioration	Some Deterioration	No Change	Some Change	Significant Change

4. Would you at this time consider your therapy with this couple to be:

a. Successful	b. Indeterminate	c. Unsuccessful
---------------	------------------	-----------------

5. Please rate how much emphasis you have placed on the following issues in your therapy with this couple in the past four weeks:

Response Choices

1	2	3	4	5
Almost None	A little	Some Emphasis	Significant Emphasis	Very Significant Emphasis

1. _____ Marital satisfaction issues
2. _____ Personality issues
3. _____ Communication issues
4. _____ Conflict resolution issues
5. _____ Sexual relationship issues
6. _____ Children and marriage issues
7. _____ Financial management issues
8. _____ Family and friends issues
9. _____ Emotional intimacy issues
10. _____ Other _____

Name: _____
 Date: _____

COUPLE FORM

1. What was the most important problem that brought you to counselling? _____

2. a. How would you rate your progress as a couple in dealing with the original problem and working toward the understood goal of counselling?
 - _____ Much better (goal almost reached)
 - _____ Some progress
 - _____ No progress
 - _____ Did not reach an understanding of the goal
 - _____ Worse

- b. (If much better or worse) Do you attribute the change in the problem to the counselling you received?
 - _____ Yes
 - _____ No
 - _____ Partially

- c. (If partially or no) To what else do you attribute the change in the problem? _____

3. Did you find that you discussed problems other than the original problem during therapy? _____ Yes _____ No.
 (If yes) Did you find dealing with these problems to be -
 - _____ Helpful
 - _____ Unnecessary

4. Did you identify physical assault (slapping, hitting, punching, etc.) as a problem in your relationship?
 _____ Yes _____ No.

5. (If yes) How often have you been physically assaulted by your partner in the past year? In the past 4 weeks?

<u>In the past year</u>	<u>In the past 4 weeks</u>
_____ Never	_____ Never
_____ Once	_____ Once
_____ Twice	_____ Twice
_____ 3-5 Times	_____ 3-5 Times
_____ 6-10 Times	_____ 6-10 Times
_____ 11-20 Times	_____ 11-20 Times
_____ More than 20 Times	_____ More than 20 Times

Page 2
Couple Form

How often have you physically assaulted your partner in the past year? In the past four weeks.

In the past year

☐ Never
☐ Once
☐ Twice
☐ 3-5 Times
☐ 6-10 Times
☐ 11-20 Times
☐ More than 20 Times

In the past 4 weeks

☐ Never
☐ Once
☐ Twice
☐ 3-5 Times
☐ 6-10 Times
☐ 11-20 Times
☐ More than 20 Times

6. Since coming for counselling, has there been any change in:

	1	2	3	4	5
	Much better	Worse	No change	Better	Much Better
a. Satisfaction with your marriage	1	2	3	4	5
b. Your partner's personality	1	2	3	4	5
c. Communication	1	2	3	4	5
d. Resolving conflict	1	2	3	4	5
e. Your sexual relationship	1	2	3	4	5
f. Your issues over children	1	2	3	4	5
g. Financial management	1	2	3	4	5
h. Social contacts	1	2	3	4	5
i. Emotional closeness	1	2	3	4	5
j. Religious/Spiritual issues	1	2	3	4	5
k. Family and friend contact	1	2	3	4	5

7. Would you, at this time, consider your counselling progress with your partner to be -

☐ Successful
☐ Not sure
☐ Unsuccessful

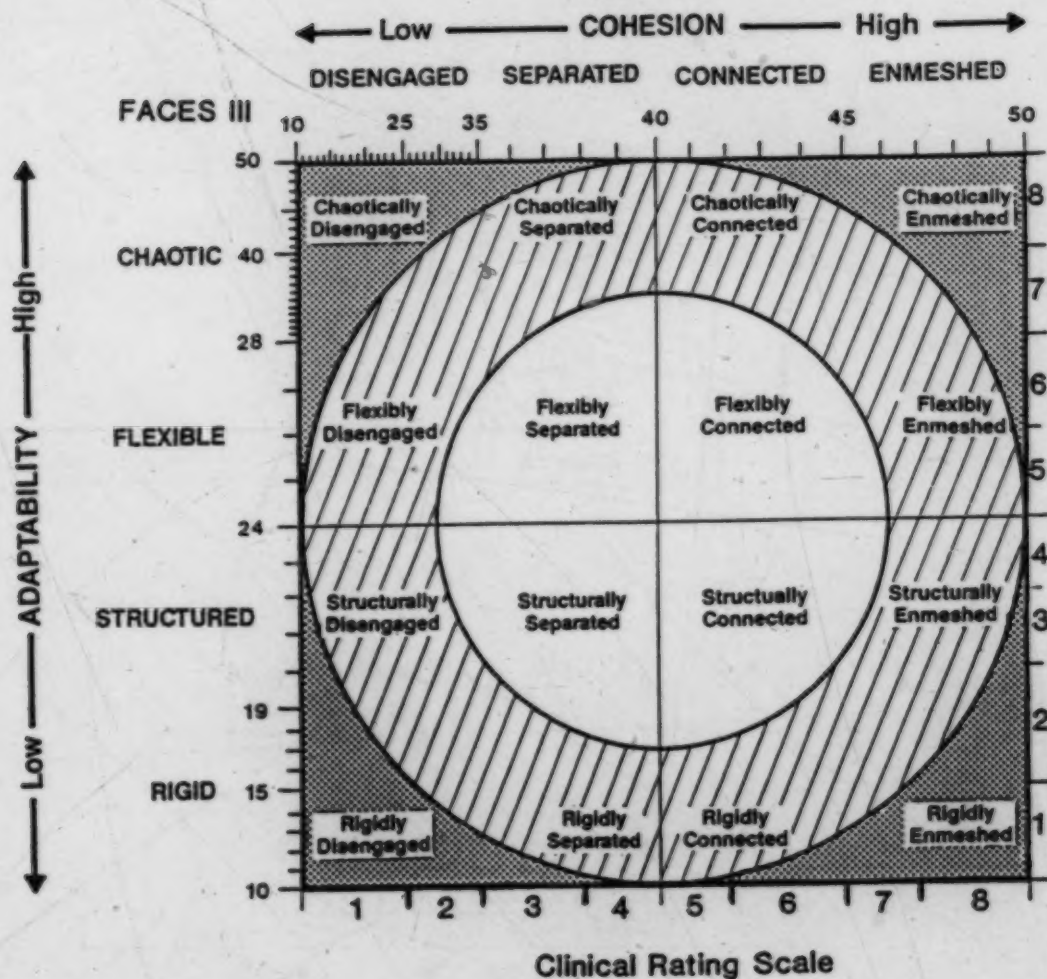
8. Would you like the results of this questionnaire to be shared with your therapist at the end of eight weeks?

☐ Yes ☐ No.

APPENDIX G
GRAPH USED TO PLOT SCORES ON
THE CIRCUMPLEX MODEL

CIRCUMPLEX MODEL OF MARITAL & FAMILY SYSTEMS

145



BALANCED

MID-RANGE

EXTREME

In plotting the couple or family into the Circumplex Model, mark the specific location that most accurately reflects the actual scores.



Family Social Science

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APPENDIX H
METHOD OF WEIGHTING SCORES OBTAINED
ON THE CONFLICT TACTICS SCALE

Method of Weighting Scores Obtained on the Conflict Tactics Scale

- (1) The items k through r are weighted in accordance with the frequencies indicated by the response categories presented to the respondent. - To do this, the 0 to 6 scale is substituted with their midpoint values of 0, 1, 2, 4, 8, 15, and 25 (see Straus, 1979).
- (2) For each item, the transformed values are then weighted for severity of violence; for low violence (items k, l, and m) multiply by 1. For moderate violence (items n, o, and p) multiply by 2; and, for severe (items q and 4) multiply by 3.

Example

<u>Item</u>	<u>Score</u>	<u>(frequency) midpoints</u>	<u>severity</u>
k	3	4	4
l	2	2	2
m	4	8	8
n	0	0	0
o	6	25	50
p	0	0	0
q	4	8	24
r	0	0	0
Total Violence Score			88

APPENDIX I

**THE HUSBAND-TO-WIFE AND WIFE-TO-HUSBAND
VIOLENCE AS MEASURED BY THE CTS**

The Husband-to-Wife and Wife-to-Husband
Violence as Measured by the CTS

Key to Variables:

- #1. Mean Husband-to-Wife Violence Reported by Husband
#2. Mean Wife-to-Husband Violence Reported by Wife
#3. Mean Wife-to-Husband Violence Reported by Husband
#4. Mean Husband-to-Wife Violence Reported by Wife

Case #	Variable #			
	1	2	3	4
1	.00	.00	.00	.00
2	4.00	1.00	3.00	3.00
3	.00	.00	.00	.00
4	.00	.00	.00	.00
5	1.00	1.00	1.00	1.00
6	1.00	8.00	6.00	1.00
7	6.00	41.00	156.00	45.00
8	.00	16.00	.00	.00
9	38.00	27.00	46.00	167.00
10	2.00	4.00	.00	.00
11	38.00	32.00	42.00	221.00
12	17.00	56.00	26.00	44.00
13	.00	.00	.00	.00
14	.00	.00	.00	.00
15	.00	.00	.00	.00
16	13.00	1.00	.00	115.00
17	1.00	.00	.00	.00
18	.00	.00	.00	.00
19	26.00	40.00	56.00	106.00
20	10.00	4.00	4.00	61.00
21	13.00	2.00	13.00	18.00
22	25.00	29.00	35.00	32.00
23	5.00	20.00	24.00	17.00
24	.00	.00	.00	.00
25	26.00	8.00	30.00	36.00
26	6.00	8.00	14.00	22.00
27	.00	.00	.00	.00
28	.00	.00	.00	.00
29	2.00	4.00	4.00	4.00
30	71.00	126.00	115.00	146.00
31	.00	5.00	.00	1.00
32	.00	3.00	.00	1.00
33	2.00	.00	2.00	2.00
34	95.00	124.00	4.00	3.00
35	10.00	2.00	2.00	10.00
36	39.00	2.00	54.00	11.00
37	4.00	1.00	.00	.00

Case #	Variable #			
	1	2	3	4
38	16.00	1.00	7.00	94.00
39	.00	.00	.00	.00
40	.00	.00	.00	.00
41	10.00	78.00	10.00	174.00
42	6.00	8.00	14.00	10.00
43	1.00	1.00	.00	2.00
44	4.00	.00	4.00	1.00
45	5.00	6.00	15.00	3.00
46	.00	.00	4.00	.00
47	16.00	16.00	12.00	38.00
48	.00	3.00	4.00	5.00
49	4.00	24.00	28.00	8.00
50	13.00	8.00	11.00	5.00
51	.00	.00	.00	.00
52	4.00	.00	.00	.00
53	20.00	59.00	45.00	57.00
54	19.00	16.00	41.00	12.00
55	3.00	4.00	22.00	4.00
56	18.00	7.00	16.00	16.00
57	33.00	168.00	98.00	153.00
58	16.00	57.00	35.00	24.00
59	30.00	20.00	.00	37.00
60	.00	.00	12.00	.00
61	12.00	.00	137.00	4.00
62	8.00	54.00	4.00	20.00
63	6.00	.00	34.00	8.00
64	3.00	27.00	102.00	5.00
65	140.00	43.00	.00	199.00
66	.00	8.00	.00	1.00
67	.00	2.00	.00	.00
68	.00	.00	.00	.00
69	2.00	9.00	2.00	1.00
70	2.00	.00	.00	.00
71	14.00	6.00	50.00	.00
72	12.00	10.00	12.00	4.00
73	1.00	.00	.00	.00
74	6.00	4.00	3.00	8.00
75	28.00	36.00	42.00	117.00